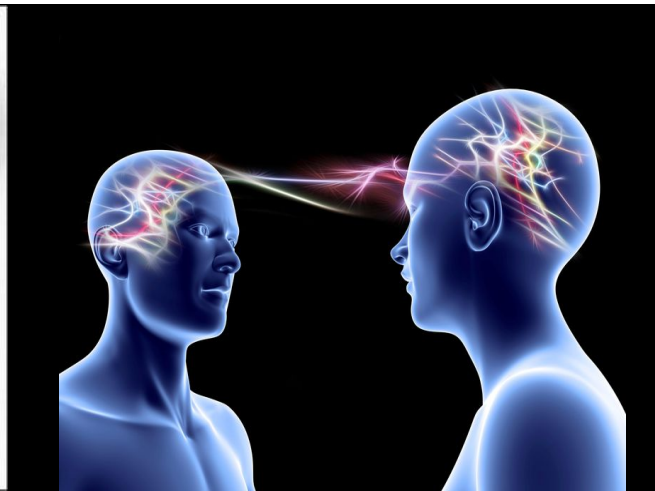




North Carolina Folktales, Unexplained Phenomenon and the Nature of Beliefs



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4th Grade Unit

I. Introduction

Unit Rationale:

Merriam-Webster defines the word paranormal as not scientifically explainable. When the topic of paranormal phenomena is introduced, debates regarding the validity of these stories or events often quickly follow. As part of the human experience, it can be scary to think that there are elements of our worldview that remain anomalous, yet this has been the default if we examine the history of the human experience. For example, until relatively recently it was universally agreed upon in the western world that the Earth is both flat and lies at the center of the physical universe. Scientific studies are influenced by many outside factors, such as the desired outcome of investors, as well as any participants pursuit of personal success and recognition to name a few. There is even a phenomenon that is widely acknowledged in the world of physics known as the observer effect. This theory states that by simply observing a phenomenon we are inevitably changing that phenomenon.

Throughout human history, myths and folktales have been passed down through oral tradition, often with the purpose of providing an entertaining explanation for a currently unexplainable phenomena. Before the era of modern science and record keeping, these stories would help us make sense of a world that we struggled to explain or manipulate to meet our needs. We have always observed currently unexplainable events but it is often the way that we interpret them that matters.

Myths and folktales are at the heart of our history and heritage in North Carolina, due in part to the old north state's deep storytelling tradition which continues to this day thanks to the many annual storytelling festivals across our state. These storytelling festivals are popular due to cultural relevance and entertainment value, yet I would argue that many of the myths and folktales that are shared through this oral tradition continue to hold our fascination due to the fact that they focus on local mysteries that remain unsolved. Children and particularly academically and intellectually advanced learners are driven to make sense of the world around them.

In the era of fake news, it is now more important than ever to teach our students, and in particular future leaders, to think critically about the information that they receive. In this unit we will examine the nature of belief. We will examine the factors that influence an individual or group's beliefs and the ways that we all influence one another's beliefs as we read and study the undeniably entertaining, yet culturally significant accounts of our local unexplained phenomena. The word "unexplained" by nature suggests that more research needs to be done, bringing relevance and real world connections to our gifted students.

Differentiation For Gifted Learners:

Each lesson in this unit has been designed with the strengths and needs of academically and intellectually advanced fourth graders in mind, but you will find that I have also provided opportunities for differentiation by student interests and motivational factors when possible.

Dimensions of Differentiation:

There are four dimensions of differentiation: content, process, product and learning environment. Through these dimensions teachers can provide multiple opportunities to meet the individualized academic, intellectual and motivational needs of a variety of learners and in this case a variety of advanced 4th grade learners. Content makes reference to the actual material or information that students will learn. Process alludes to the activities that students will complete and the skills that are necessary to achieve the desired outcome. Product refers to the means through which students will exhibit their knowledge and learning environment has to do with options presented within or changes to the actual physical environment. I have listed the differentiation opportunities that I have provided in this unit under the appropriate dimension below...

- *Content Differentiation:*
 - I have frequently provided articles, stories and other source materials in each lesson that are intended for a sophisticated audience.
 - Advanced level vocabulary is embedded within each lesson.
 - North Carolina fifth grade Social Studies and Literacy learning standards have also been embedded throughout this unit.
 - Students are provided with a variety of text choices at several points in the unit.
- *Process Differentiation:*
 - A majority of the process skills utilized throughout this unit are based in the upper tier of Bloom's Taxonomy (synthesis & evaluation) and are designed to elicit higher level thinking, skill development and comprehension of content.
 - A variety of hands-on activities including rotating centers are presented at several points throughout the unit.
 - A majority of learning activities are student centered, allowing for teachers to provide appropriate levels of support to individuals or groups.
- *Product Differentiation:*
 - A majority of the teacher proposed questions throughout this unit are based in the upper tiers of Bloom's Taxonomy (synthesis and evaluation).

- At several points across the unit learning products are open-ended, allowing for students to exhibit learning through their individual interests and choices.
- Students are included in the process of creating evaluative rubrics.
- *Learning Environment Differentiation:*
 - Students frequently work in groups throughout this unit but students who choose to work independently should be permitted to do so. Be sure to provide quiet work areas for these students if necessary.
 - While many students learn best while sitting quietly, others may need to stand or even move about (within reason) to do their best learning. Although several opportunities such as rotation between centers allow for this variety of learning styles, try to be permissive of this learning style throughout the unit and provide frequent breaks which provide opportunities for physical movement as well.
 - Groupings are frequently shaken up to encourage each student to take on a variety of roles within those groups as well as within the classroom.
 - A variety of cultural perspectives have been and should be represented when possible.

Features of Differentiation:

The features of differentiation: complexity, challenge, depth, creativity, and acceleration provide a framework through which educators can determine the correct translation and differentiation of learning activities based on common core or state learning standards (Karnes, Stephens, 2008 p. 216).

- *Complexity:* Multiple learning resources are utilized throughout a majority of this unit to illustrate a variety of perspectives on each topic.
- *Challenge:* Students are expected to apply their learned skills across multiple disciplines and academic subjects throughout this unit.
- *Depth:* The concept of belief is examined through a variety of applications. Individual research and choice are encouraged throughout several lessons and during the performance task.
- *Creativity:* Communication to real-world audiences is present in several lessons and during the performance task.
- *Acceleration:* A wide variety of learning standards representing multiple academic subjects are embedded in each lesson, many at the 5th grade level, and students are expected to show growth or mastery of these standards at an accelerated pace relative to their general ed. classroom peers.

Population for the unit:

This unit was designed to be taught as part of the Durham Public Schools SPARK camp program in the summer of 2019. Due to the wide variety of strengths and needs of students in a public-school population there were multiple student categories that I had to consider during the planning process.

Despite the sincere efforts of educators and administrators, Durham Public School continues to struggle with the disproportionately large group of Caucasian students and by comparison disproportionately small groups representing other ethnic populations in our AIG program (Groeger, Waldman & Eads, 2018). Much of this issue is due to outside influences but I needed to take it into account that many of these students have had exposure to a variety of enrichment opportunities before they entered my classroom. At the same time, I also recognized that the group would be socioeconomically and culturally diverse.

I have included multiple cultural perspectives wherever possible and encouraged students to share their cultural perspectives on all of the topics that we discussed. I felt that ghosts, aliens, monsters, E.S.P. and similar unexplained topics, as well as the concept of belief would appeal to modern elementary school students from a variety of backgrounds, and encourage them to share their unique perspectives on the topic. In short, unexplained phenomenon and folktales are areas that to me provided an opportunity for us to celebrate our mutual interests and share our differences in order for all of us to reach a deeper understanding of the topic.

II. Content, Process & Concept Goals

- **Content Goals and Outcomes**

- **Goal 1:** To develop an understanding of the impact of various cultural groups on North Carolina.

Students will be able to...

1. Analyze the change in leadership, cultures and everyday life of American Indian groups before and after European exploration.
2. Exemplify how the interactions of various groups have resulted in borrowing and sharing of traditions and technology.
3. Explain how the movement of goods, ideas and various cultural groups influenced the development of regions in North Carolina.

4. Understand how cultural narratives (legends, songs, ballads, games, folk tales and art forms) reflect the lifestyles, beliefs and struggles of diverse ethnic groups.
 5. Explain how the artistic expression of various groups represents the cultural heritage of North Carolina.
- **Process Goals and Outcomes**
 - **Goal 2:** To develop critical thinking skills with application to Social Studies.
Students will be able to.....
 1. Provide evidence and data to support an informed belief.
 2. Identify and manipulate outside influences that can affect the way an event or story is portrayed.
 3. Analyze multiple perspectives on the same topic.
 4. Make inferences based on evidence
 - **Concept Goals and Outcomes**
 - **Goal 3:** To understand the concept of belief
Students will be able to.....
 1. Categorize and label different aspects of belief
 2. Evaluate the validity of information in order to establish informed personal beliefs on a given topic.
 3. Analyze the relationship between an individual's biases and their personal beliefs on a given topic.
 4. Make generalizations about the relationship between beliefs and truth.

III. Assessment Plan

Student work samples (charts, papers, and google doc performance tasks)

Formative Assessments:

- **Lesson 1-** *Taba: Judaculla Rock*
 - *Students orally respond to teacher pre-lesson questions.*
 - *Students work in groups to categorize and label responses to previous questions, followed by whole group oral responses to remaining during-lesson questions.*
 - *Students respond to post-lesson questions on a Google Doc that has been shared with the class (students should receive a secret class number that only they and the teacher know to answer questions in order for students to maintain anonymity if they desire).*

- **Lesson 2-** Simulation: *Objectivity and Bias in Journalism*
 - Students orally respond to pre-lesson questions while studying seance photograph.
 - Students respond orally to during-lesson questions after bigfoot fact/rumor game.
 - During the actual simulation, students work in groups to write brief articles that meet the needs of their outside influences, yet still attempt to remain as objective as possible.
 - Students respond to post-lesson questions on a shared Google Doc using their secret class numbers.
- **Lesson 3-** Creative Problem Solving: *North Carolina Ghost Stories*
 - *Oral responses to pre-lesson questions about N.C. Ghost Story archivist, radio host and author John William Harden*
 - *Students orally respond to during-lesson questions after reading North Carolina ghost stories in groups and sharing their findings. Questions lead students to find similarities and problems centered around stories of ghost encounters.*
 - *Students work in groups to complete charts that list all of the facts associated with the identified problem or challenge. Individuals in each group work together to complete a final agreed upon problem statement.*
 - *Groups are given 20 minutes to list as many solutions as possible and then discuss which solution plan that they will carry out. Groups share their solutions and results with the class.*
 - *Teacher asks students to orally respond to all but the final post-lesson question.*
 - *Using their secret class number students respond to the final question on a piece of paper, crumple and throw it across the room, pick up another students response and leave a comment.*
- **Lesson 4-** Bruner's Structure of The Discipline: *Parapsychology*
 - Students make a personal list of all that they know about paranormal researchers. Students either answer all pre-lesson questions at this time orally or in writing.
 - Students orally respond to during-lesson questions about articles.
 - Students rotate between the five centers, recording observations and answering the same questions at each. Groups then share information and summarize their results to the class.
 - Students respond orally to all but the final 3 post-lesson questions

- Students are placed in new groups and create posters that illustrate their beliefs and connections made regarding parapsychology and what the next steps might be in their experiments. Students also leave comments on each other's posters during a gallery walk.
- Students complete a 3-2-1 summary. 3 post-its should summarize main points from the lesson, 2 should be about things that they disagree with or found controversial about the lesson and on the final post-it students should answer the question... "how do beliefs shape truth"?

Summative Assessment:

- **Performance task**

- Students will play the role of a television writer and director. Their audience will be Television Executives at the History Channel. Students will design three episodes for a new television show about North Carolina Mysteries and Folktales but the situation calls for them to respectfully represent opposing viewpoints on each topic/episode. The product will be a Google Slides presentation that displays their work. A strong example would exemplify a solid understanding of the impact of various cultural groups on North Carolina, utilization of enhanced critical thinking skills and a thorough recognition of the complex nature of the concept of belief. See section II, pages 5 and 6 for further elaboration on specific content, process and concept goals.

IV. Lesson Plans & Materials

| | | |
|---|---------------------|---|
| TEACHER NAME | | Lesson # |
| Ethan Montgomery | | 1 |
| MODEL | CONTENT AREA | GRADE LEVEL |
| Taba | Social Studies/ELA | 4 |
| CONCEPTUAL LENS | | LESSON TOPIC |
| Belief | | Judaculla Rock/Cherokee Legends |
| LEARNING OBJECTIVES <i>(from State/Local Curriculum)</i> | | |
| <p style="text-align: center;">Social Studies Standards</p> <ul style="list-style-type: none"> • 5.C.1.1 Analyze the change in leadership, cultures and everyday life of American Indian groups before and after European exploration. • 5.C.1.2 Exemplify how the interactions of various groups have resulted in borrowing and sharing of traditions and technology. • 5.C.1.3 Explain how the movement of goods, ideas and various cultural groups influenced the development of regions in the United States. • 5.C.1.4 Understand how cultural narratives (legends, songs, ballads, games, folk tales and art forms) reflect the lifestyles, beliefs and struggles of diverse ethnic groups. • 4.H.1.3 Explain how people, events and developments brought about changes to communities in various regions of N.C. • 4.H.2.1 Explain why important buildings, statues, monuments, and place names are associated with the state's history. <p style="text-align: center;">ELA Standards</p> <ul style="list-style-type: none"> • RI 4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text. • RI 4.3 Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text. | | |
| THE ESSENTIAL UNDERSTANDING <i>(What is the overarching idea students will understand as a result of this lesson?)</i> | | THE ESSENTIAL QUESTION <i>(What question will be asked to lead students to “uncover” the Essential Understanding)</i> |
| <i>Beliefs shape truth</i> | | <i>How do beliefs shape truth</i> |
| CONTENT KNOWLEDGE <i>(What factual information will students learn in this lesson?)</i> | | PROCESS SKILLS <i>(What will students be able to do as a result of this lesson?)</i> |

Students will know **THAT**.....

- A belief is a trust, faith or confidence in someone or something
- A truth is a fact or belief that is accepted as true.
- Bias means a preconceived opinion or belief that is in favor of or against a person, place or thing that is not based in reason.
- Influences are people, places or things that have the power to change behavior, belief or opinion of a person or persons.
- Point-of-view refers to a particular attitude or way of considering a matter.
- A hypothesis is a proposed explanation based on the basis of limited evidence as a starting point for further explanation.
- The Cherokee people made important contributions to the rich cultural history of NC
- Various cultural groups have borrowed, shared and made contributions to one another's ideas in the western region of NC.
- Cultural legends reflect the beliefs and struggles of the NC Cherokee people.
- Judaculla Rock is a relevant monument associated with the history of NC
- Inferences can be drawn from the source material
- Events including what happened and why can be explained using information, examples and details in the source material.

Students will **be able to**.....

- Analyze
- Synthesize
- Categorize
- Classify
- Discuss
- Create
- Reorganize
- Hypothesize
- Infer
- Justify
- Generalize
- Collaborate

GUIDING QUESTIONS

What questions will be asked to support instruction?

Include both "lesson plan level" questions as well as questions designed to guide students to the essential understanding

| Pre-Lesson Questions: | During Lesson Questions: | Post Lesson Questions: |
|---|--|---|
| <ol style="list-style-type: none"> 1. What do you see here? 2. Why do you say that? 3. What else do you see? 4. Why do you say that? 5. What do you believe about this image? 6. What is true about this image? | <ol style="list-style-type: none"> 1. Where do you see the concept of belief in the resources that we have studied? 2. Where else might we see the concept of belief in these resources? 3. What are some of the beliefs that we missed of Native Americans, Scientists, Historians, Tourists, etc. 4. What aspects of belief have changed according to the video or article? 5. Which aspects of belief might be related or go together? 6. What labels would you give these groups? 7. Which groups could you combine into a few larger, more encompassing groups? 8. Which of these items could go in more than one group? 9. What are some new, different groups that we can put these items into? 10. Why would you group them this way? 11. What would you call these groups? | <ol style="list-style-type: none"> 1. What do you believe about Judaculla rock? 2. For what reasons can people's beliefs change? 3. What is truth? 4. In what ways can the truth be different for different people? 5. In what ways can the truth change over time? 6. What is the relationship between belief and truth? 7. How do beliefs shape truth? |

DIFFERENTIATION

(Describe how the planned learning experience has been modified to meet the needs of gifted learners. Note: Modifications may be in one or more of the areas below. Only provide details for the area(s) that have been differentiated for this lesson.

| Content | Process | Product | Learning Environment |
|--|--|---------|----------------------|
| <p>Resources are designed for a sophisticated audience.</p> <p>5th Grade Social Studies standards have been applied to this lesson</p> | <p>Students engage in in-depth critical thinking as they must analyze the concept of belief through grouping and regrouping.</p> | | |

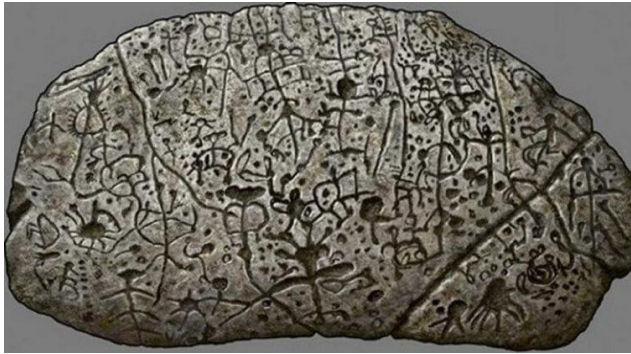
PLANNED LEARNING EXPERIENCES

(What will the teacher input? What will the students be asked to do? For clarity, please provide detailed instructions)

Engage and Connect - This phase focuses on piquing students' interest and helping them access prior knowledge. This is the introduction to the lesson that motivates or hooks the students.

- Chairs are set up so that all students are gathered around the center of the board where an image will be projected.
- Students are told that they will be shown an image and that they should observe it silently for 30 seconds, saving comments and questions until the teacher tells them that time is up.
- Students are presented with the following image on the board:

)



- The teacher will then ask the following 3 pre-lesson questions over and over:
 - a. What do you see here?
 - b. Why do you say that?
 - c. What else do you see?
- When the conversation begins to slow down, ask the following questions:
 - a. What do you believe about this image?
 - b. What is true about this image?

Explore - In this phase, the students have experiences with the concepts and ideas of the lesson. Students are encouraged to work together without direct instruction from the teacher. The teacher acts as a facilitator. Students observe, question, and investigate the concepts to develop fundamental awareness of the nature of the materials and ideas.

1. Listing:

- Students are told that we will be focusing on the concept of belief as we study the origin and meaning of this rock covered in petroglyphs.
- We will first watch a video about the rock together as a group. Students should make a personal list of any aspects of belief (be they words, phrases or imagery) that they notice in the video <https://www.youtube.com/watch?v=aT381AsQ2d4>
- Next students are provided with the article from the following website <https://peopleofonefire.com/judaculla-rock-the-meaning-of-these-petroglyphs-is-solved-by-linguistics-and-some-knowledge-of-history-elsewhere.html> and asked to highlight or note any aspect of the concept of belief as they read the article quietly and independently..
- Ask this during-lesson question of the class:
 - Where do you see the concept of belief in the resources that we have studied?
- Students will share their answers out loud as the teacher records them on the board to make a shared class list. Ask probing questions if necessary to broaden the list:
 - Where else might we see the concept of belief in these resources?
 - What are some of the beliefs that we missed of Native Americans, Scientists, Historians, Tourists, etc.
 - What aspects of belief changed according to the video or article?

Explain - Students communicate what they have learned so far and figure out what it means. This phase also provides an opportunity for teachers to directly introduce a concept, process, or skill to guide students toward a deeper understanding.

2. Grouping and Labelling

- Ask these during lesson questions of the class:
 - Which aspects of belief might be related or go together?
 - What labels would you give these groups?
- Students will be put into groups of 3 or 4 and provided with post-its and/or chart paper and markers, in order to record items on the all-inclusive list and place them into smaller groups of their own making, based on similarities. Students will be instructed to make at least four different groups or categories that have each been labelled with a group title. The teacher will emphasize that categories should not be based on trivial ideas such as listing alphabetically and that items can only be placed in one category or group at this time. Each group must also have at least 3 words or phrases.
- The teacher should walk around the room asking questions that guide students towards higher level thinking when necessary, while at the same time allowing students to arrive at their own unique conclusions.
- Students groups then share and should be able to defend their 4 or more category titles in relation to the topic of belief to the rest of the class through the following question...

Elaborate —Allow students to use their new knowledge and continue to explore its implications. At this stage students expand on the concepts they have learned, make connections to other related concepts, and apply their understandings to the world around them in new ways

3. Subsuming, Regrouping & Renaming

- At this point, students will be asked to make 3 completely new categories or groupings of the items. No category/group name or label can be repeated from the previous exercise and students will be expected to defend

these new groups to the class as well based on the topic of belief. Words CAN be used in more than one group/category at this point but each category should still have at least 3 items. Student categories must be based in some way in relation to the concept of "belief. Ask students to think about the following questions before they begin.

- Which groups could you combine into a few larger, more encompassing groups?
- Which of these items could go in more than one group?
- Students are told that they should be able to answer the following questions when their group is finished...
 - What are some new, different groups that we can put these items into?
 - Why would you group them this way?
 - What would you call these groups?
- The teacher should walk around the room asking questions that guide students towards higher level thinking when necessary, while at the same time allowing students to arrive at their own unique conclusions.
- Groups then share their new labels and reasoning for them with the class.

Evaluate: *This phase assesses both learning and teaching and can use a wide variety of informal and formal assessment strategies.*

4. Generalizing

- Ask the following post-lesson questions...
 - What do you believe about Judaculla rock?
 - For what reasons can people's beliefs change?
 - What is truth?
 - In what ways can the truth be different for different people?
 - In what ways can the truth change over time?
 - What is the relationship between belief and truth?
- Each student is provided with a secret number that only they and the teacher will know.
- Students are given access to a group Google Doc where they will create a statement/generalization next to their secret number that articulates the relationship between beliefs and truth. Evidence from the film and texts should be referenced in the statement.
- Class then studies the group Google Doc to make comments on any statement that helps them understand or enhance their own thinking regarding the relationship between belief and truth in some way.
- Ask the class the following post-lesson questions...
 - How do beliefs shape truth?

JUDACULLA ROCK . . . THE MEANING OF THESE PETROGLYPHS IS SOLVED BY LINGUISTICS AND SOME KNOWLEDGE OF HISTORY ELSEWHERE

Posted by [Richard Thornton](#) | Nov 1, 2017 | [Appalachian Mountains](#), [Art](#), [Historic Preservation](#),

[Humor](#), [Language](#), [Mysteries](#), [Petroglyphs](#) | 8 |



GPS Coordinates: Latitude – 35°18'04.4"N ~ Longitude – 83°06'36.6"W

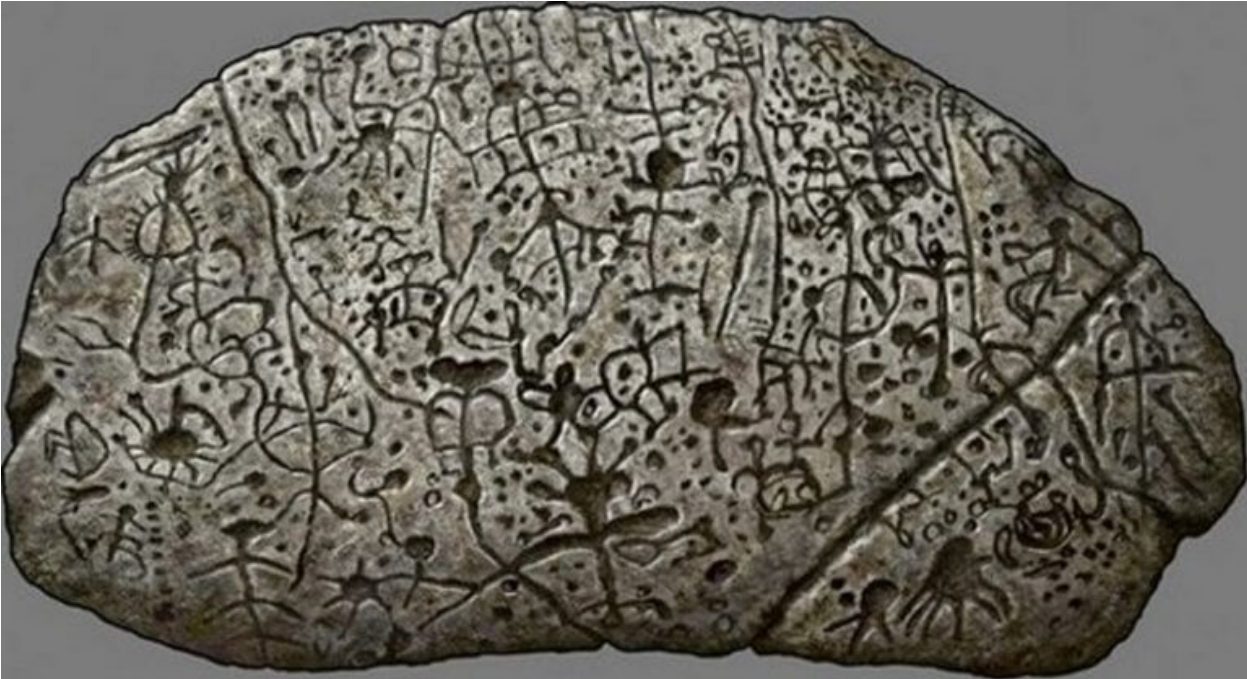
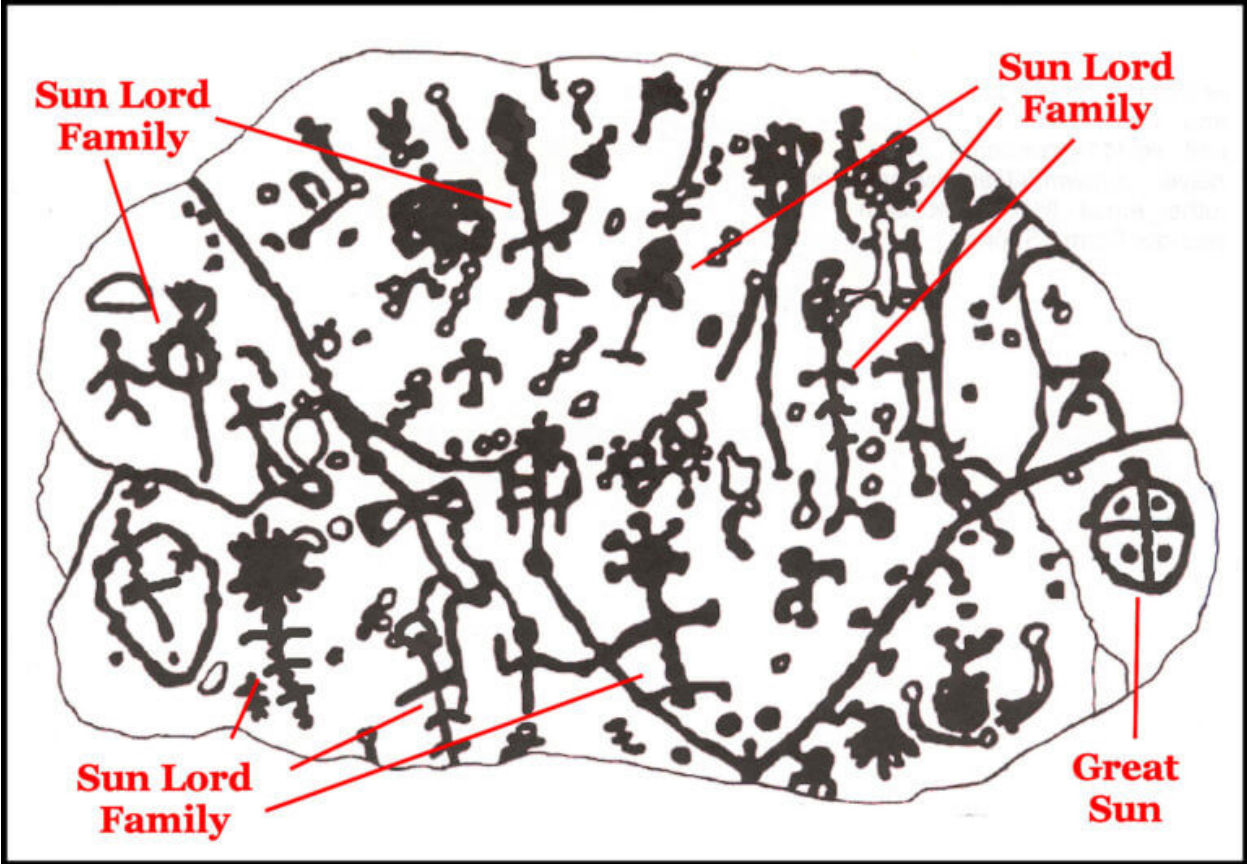
There is a boulder in the Tuckasegee River Basin of the North Carolina Mountains, which contains more symbols than any petroglyphic site in the eastern United States. A total of 1,548 symbols have been counted on the soapstone boulder. There are also several hemispherical scars where soapstone bowls were long ago extracted from the boulder. Some of the symbols are actually carved into the bowl-shaped scars.

For over two centuries, the Judaculla Rock was described as a mystery. No one knew who carved the symbols, when they carved them or what they meant. That all changed a decade ago, when North Carolina archaeologists announced that their Cherokees carved the symbols and that the boulder was a map of the Cherokee Nation. Oh really? The Cherokees don't even know what Judaculla means and those symbols appear in several other parts of the world, where the Cherokees never lived. Guess they didn't know that, did they?

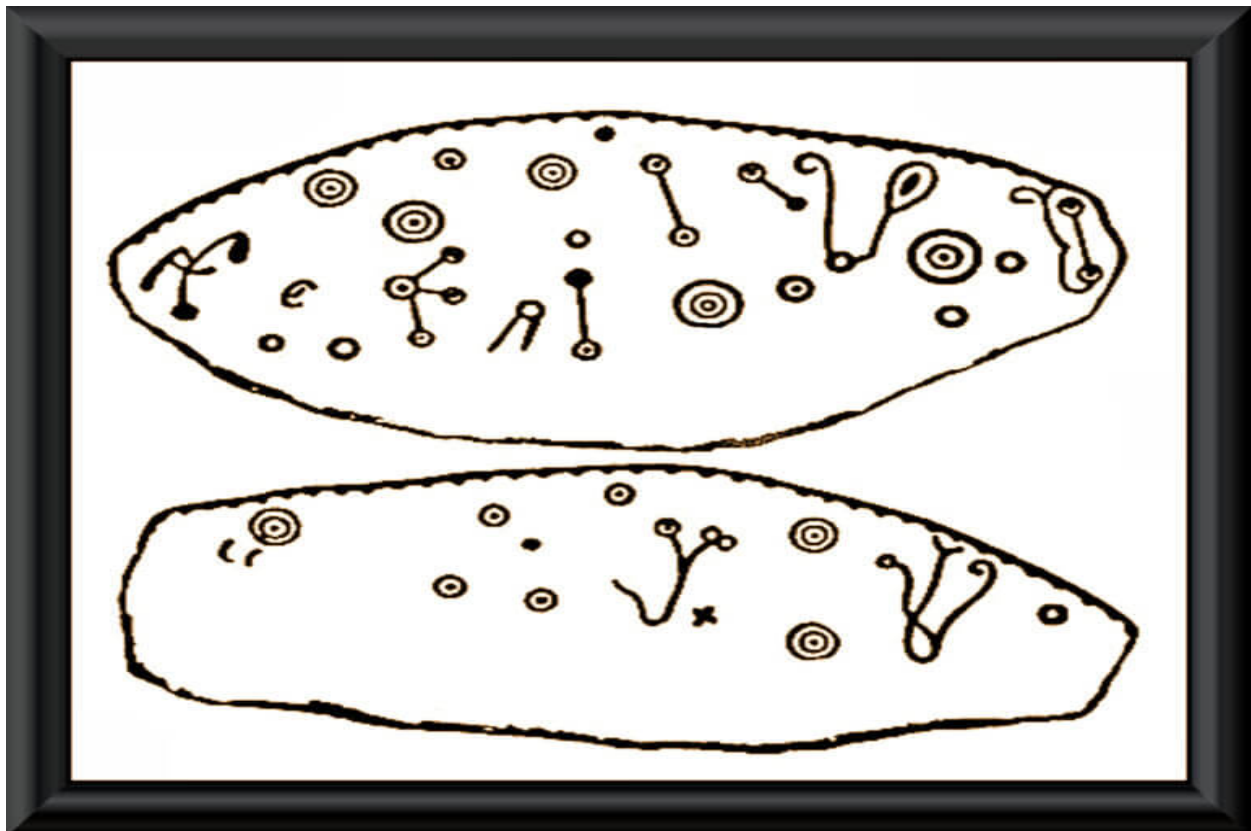
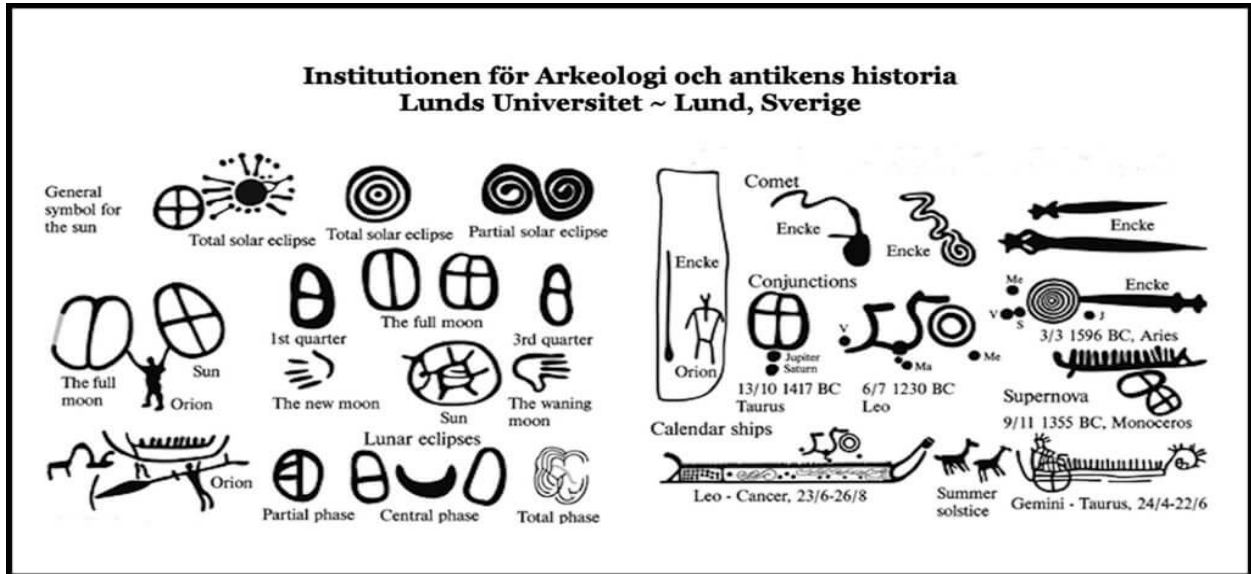
It is a problem that has plagued the archaeology profession in the Southeastern United States since day one . . . that is . . . practicing archaeology in the absence of anthropology. In all other parts of the globe, archaeologists consider it mandatory to first learn the languages and cultural history of the people, who lived on the site that they are excavating, before interpreting what was found in that site. In other words, just saying "Judaculla is an ancient

Cherokee word, whose meaning has been forgotten” just doesn’t cut it in England, Mexico, Ireland, France, Peru, Scandinavia, Russia, China, Colombia, Israel, Japan, Germany, Italy, Iraq, Egypt or Australia. First, though, POOF will compare some petroglyphs around the world.





Look at the crab-like figure on the lower left of the boulder. Now look at the Swedish Bronze Age symbol for an eclipse below.



Sun Lords



Madsbakke
Denmark



Parowan Gap
Utah



Judaculla Rock, NC
Squirrel Mountain
Georgia



Peterborough
Ontario
Canada



Ometepe
Island
Nicaragua

Great Sun or High King



Three Rivers Site
Tularosa
New Mexico



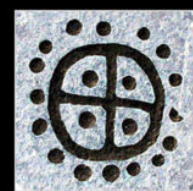
Royal Sun
on Etula gorget
Northwest Georgia



Glyph on Boulder 6
Track Rock Gap
Georgia Mountains



Maya Royal Sun
Palenque glyph
Chiapas, Mexico



Southern Sweden
Bornholm Island
Denmark

Cherokee interpretation of the Judaculla Rock

Cherokee legends link Judaculla (also known as Tuli-kula/Yuthakullah/Tsul'kalu) to their slant-eyed Master-of-Game Giant with the surrounding landscape, including landforms, rivers, and Indian towns. This tradition has been elaborated on in recent years by academicians and anthropologists employed by the Eastern Band of Cherokees or the State of North Carolina. The most common version of the story, told today, was that a great slant eyed giant arrived from across the Pacific Ocean to the Tuckasegee River Valley. Until about 15 years ago, the legend had him living there, when the Cherokees arrived. Now the legend told tourists is that the Cherokees had always lived in the Tucksegee River Valley and that the Judaculla Giant arrived many centuries ago. He carved the Judaculla Rock as a map to acquaint them with their new homeland.

For the record . . . the South Carolina Colonial Archives contains a report from 1745, transmitted from the Cherokees via an Indian trader to the Royal governor. The report states that the Cherokees explored the Upper Tuckasegee River Valley for the first time that year. They encountered Europeans with tan skins like the Cherokees, but the men were hairy all over their bodies and wore long beards. All the families spoke a dialect of Spanish. Their houses were built out of logs, but had arched windows. The Cherokees said that these strangers “worshipped a book.” There was no mention in the report about any giants living near Sylva or Cullowhee.

Tuli-kula is the Cherokee-nization of the original Itsate Creek name of a large proto-Creek town, where Western North Carolina University is now located. The original Itstate words are Tula-Kula, which means “Town of Kula.” See below for the explanation of Kula.

Yuthakullah is a very interesting pronunciation. It is how someone speaking Old Anglo-Saxon or Gamla Norsk (Old Norwegian) would pronounce Judaculla (Yudakulla). How a Viking Age pronunciation of a word would appear in the North Carolina Mountains is anyone’s guess.

Both the Germanic Scandinavians and the Gaelic Irish had traditions that their lands were formerly occupied by giants. There could be a connection between these traditions and actual tall human aborigines.

Etymology of nearby Creek geographical names

Tuckasegee – This is the Anglicization of the Muskogee Creek word, Tokahsi-gi, which means “Descendants of the Freckled Ones – People. The Tokahle or Tokahsi became one of the most powerful divisions of the Creek Confederacy after moving south to the warmer climate of western Georgia and eastern Alabama. Their new capital was Tokahpasi (Tuckabatchee) on the Tallapoosa River. One of their bands migrated to northeastern Florida in the 1700s and became a core member of the Seminole Alliance. Spanish archives call these people, the Toque, while British settlers called them the Tokee.

The Tokahle men were known among the Creeks as being brawny giants. This is highly significant, since according to the De Soto Chronicles, the Creek men at the time of European contact, averaged a foot taller than Spaniards. Their brawniness could well be the origin of the Cherokee legend about “Judaculla the Giant.”

The capital and the province in which the Tokahle lived during pre-Spanish contact times, was named Kulla or Kura. See below for the etymology of Kulla. The capital was located where Cullawhee, NC now sits. Cullawhee is the Anglicization of a hybrid word, which had a Creek tribal name as its root, which was attached to a Cherokee suffix meaning “place of.”

The Cherokee suffix “yi” is equivalent to the Itza Maya and Itsate Creek suffix, pa, and the Muskogee Creek suffix, fa.

Juda – This is the Anglicization of the Cherokee-nization of the Muskogee-Creek word, sutv . . . pronounced jzhü – dä by Muskogees and Cherokees. Cherokees and Muskogee Creeks pronounce a Creek T as a D. Thus, “Thank you” in Creek, mvto, sounds like Mahdo in Muskogee and Cherokee, but mahto, in Georgia and Florida Creek languages. Itstate and Apalache Creeks pronounce a T very similarly to an English T.

Culla – This is the Anglicization of the Proto-Creek town and province in North Carolina named Kura. Muskogean roll their R’s so hard that most speakers of European languages, other than Spanish, write the R down as an L. The correct spelling survives as the name of a mountain in Northeast Georgia – Currahee. The capital of Kura was where Western North Carolina University is now located. Three large mounds were bulldozed there in the 1970s to build WCU’s administration building.

In other words, Judaculla means “The Sky Over the Province of Kura.” This explains why there are hundreds of pecked dots on the boulder. They are the millions of stars in the background of brighter stars and galaxies, which appeared to humans to be constellations. Evidently, the symbols super-imposed over the matrix of stars represent constellations . . . which the people of Kura assumed to be other provinces of extraterrestrial people with their own sun lords.

The Creeks were one of the few pre-industrial cultures in the world, who believed that the Earth was just one planet among many, in which humanoid peoples lived. This belief derived from another tradition that remembered past frequent visitors from other solar systems and galaxies. Their best buddies were extremely tall humanoids from a solar system in the Pleiades Constellation. According to this legend, these “giants” built at least three “star gates” on the Great Spiral Mound at Ocmulgee National Monument, the Great Round Mound at Rembert Mounds near Elberton, GA and in the Nacoochee Valley. Some priests of the Creek Wind Clan used the star gates to visit the home planet of their super-sized buddies, but it was a dangerous journey for homo sapiens. Several priests returned dead or horribly deformed in the star gates.



RICHARD THORNTON

President at [The Apalache Foundation](#)

Richard Thornton is a professional architect, city planner, author and museum exhibit designer-builder. He is today considered one of the nation's leading experts on the Southeastern Indians. However, that was not always the case. While at Georgia Tech Richard

was the first winner of the Barrett Fellowship, which enabled him to study Mesoamerican architecture and culture in Mexico under the auspices of the Instituto Nacional de Antropología e Historia. Dr. Roman Piña-Chan, the famous archaeologist and director of the Museo Nacional de Antropología, was his fellowship coordinator. For decades afterward, he lectured at universities and professional societies around the Southeast on Mesoamerican architecture, while knowing very little about his own Creek heritage. Then he was hired to carry out projects for the Muscogee-Creek Nation in Oklahoma. The rest is history. Richard is the Tribal Historic Preservation Officer for the KVVETV (Coweta) Creek Tribe and a member of the Perdido Bay Creek Tribe. In 2009 he was the architect for Oklahoma's Trail of Tears Memorial at Council Oak Park in Tulsa. He is the president of the Apache Foundation, which is sponsoring research into the advanced indigenous societies of the Lower Southeast.

| | | |
|---|---------------------|---|
| TEACHER NAME | | Lesson # |
| Ethan Montgomery | | 2 |
| MODEL | CONTENT AREA | GRADE LEVEL |
| Simulation | ELA/Social Studies | 4th |
| CONCEPTUAL LENS | | LESSON TOPIC |
| Belief | | Objectivity and Bias in Journalism |
| LEARNING OBJECTIVES <i>(from State/Local Curriculum)</i> | | |
| <p>Language Arts Standards</p> <ul style="list-style-type: none"> ● RI.5.6 Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent. ● RI.5.8 Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s). ● SL.5.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly. ● W.5.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information. ● W.5.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. ● W.5.4 Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. <p>Social Studies Standards</p> <ul style="list-style-type: none"> ● 4.G.1.3 Exemplify the interactions of various peoples, places and cultures in terms of adaptation and modification of the environment. ● 4.H.1.3 Explain how people, events and developments brought about changes to communities in various regions of N.C. | | |
| THE ESSENTIAL UNDERSTANDING <i>(What is the overarching idea students will understand as a result of this lesson?)</i> | | THE ESSENTIAL QUESTION <i>(What question will be asked to lead students to "uncover" the Essential Understanding)</i> |
| <i>Beliefs shape truth</i> | | <i>How do beliefs shape truth?</i> |
| CONTENT KNOWLEDGE <i>(What factual information will students learn in this lesson?)</i> | | PROCESS SKILLS <i>(What will students be able to do as a result of this lesson?)</i> |
| <ul style="list-style-type: none"> ● Belief is a trust, faith or confidence in someone or something. ● News refers to noteworthy information ● A bias is a preconceived belief that is in favor of or against a person, place or thing that is not based in reason. ● Biases can influence which knowledge is shared in the media. ● Influences are people, places or things that have the power to change behavior, belief or opinion of a person or persons. ● Objectivity means a lack of bias, prejudice or judgement ● Knowledge is the theoretical or practical understanding of a subject. ● Rumors are circulating stories or reports of uncertain or doubtful truth. ● Truth can mean that which is true or in accordance with fact or reality. ● Truth can also mean a fact or belief that is accepted as true. ● The media has the power to influence the beliefs of their readers on a story or topic. ● Belief bias is the tendency to be influenced by one's knowledge about the world in evaluating conclusions and to accept them as true because they are believable rather than because they are logically valid. | | <ul style="list-style-type: none"> ● Assess the value of information ● Consider multiple perspectives ● Analyze patterns ● Utilize critical thinking ● Compare and Discriminate between ideas ● Develop strategies for problem solving ● Synthesize old ideas to create new ones ● Make generalizations |

GUIDING QUESTIONS

What questions will be asked to support instruction?

Include both "lesson plan level" questions as well as questions designed to guide students to the essential understanding

| Pre-Lesson Questions: | During Lesson Questions: | Post Lesson Questions: |
|--|--|--|
| <ol style="list-style-type: none"> 1. What do you see? 2. What do you see that makes you say that? 3. What else do you see? 4. What do you know about the image? 5. What do you believe about the image? 6. What is the difference between what you know about the image and what you believe about the image? 7. How could bias impact what you believe about this image? 8. How might bias influence what we know about this or any image? | <ol style="list-style-type: none"> 1. How could rumors about a story or event impact the way that it is reported? 2. What does it mean to be objective about a story or event? 3. What is the difference between an objective belief and a biased belief? 4. What is the relationship between knowledge and truth? 5. What is "the news"? 6. How do we know if the news is true? 7. Who might disseminate fake news and why? 8. What are some challenges that you can foresee in attempting to tell the objective truth about a story? 9. What stood in the way of your readers receiving the objective truth? 10. How might what you wrote in your articles influence the beliefs of your readers? 11. What kinds of biased or objective beliefs about these topics might your readers develop if you are their sole source of news on this topic? | <ol style="list-style-type: none"> 1. What are the similarities and differences between sharing news and sharing knowledge. 2. What information would you use to support the view that biased beliefs can be contagious. 3. What is a one sentence statement that you can make about truth? 4. How might you evaluate the level of truth in a story? 5. What is the relationship between beliefs and truth? 6. How do beliefs shape truth? |

DIFFERENTIATION

(Describe how the planned learning experience has been modified to meet the needs of gifted learners. Note: Modifications may be in one or more of the areas below. Only provide details for the area(s) that have been differentiated for this lesson.)

| Content | Process | Product | Learning Environment |
|--|---|---------|----------------------|
| <ul style="list-style-type: none"> • Sophisticated text and vocabulary is included in this lesson. • 5th grade ELA standards applied | <ul style="list-style-type: none"> • Students take on roles in a real-world scenario | | |

PLANNED LEARNING EXPERIENCES

(What will the teacher input? What will the students be asked to do? For clarity, please provide detailed instructions)

Engage and Connect - *This phase focuses on piquing students' interest and helping them access prior knowledge. This is the introduction to the lesson that motivates or hooks the students.*

- The following image should be ready for projection on the smartboard before students arrive. Chairs should be placed facing the area of the board where it will be projected...



(image retrieved from: <https://www.collectorsweekly.com/articles/ghosts-in-the-machines-the-devices-and-defiant-mediums-that-spoke-for-the-spirits/>)

- Students are shown the image and asked to examine it in silence for :30 seconds.
- Ask the following pre-lesson questions (ask the first three questions over and over until the conversation comes to a lull, then ask the remaining questions):
 - What do you see?
 - What do you see that makes you say that?
 - What else do you see?
 - What do you know about the image?
 - What do you believe about the image?
 - What is the difference between what you know about the image and what you believe about the image?
 - How could bias impact what you believe about this image?
 - How might bias influence what we know about this or any image?

Explore - *In this phase, the students have experiences with the concepts and ideas of the lesson. Students are encouraged to work together without direct instruction from the teacher. The teacher acts as a facilitator. Students observe, question, and investigate the concepts to develop fundamental awareness of the nature of the materials and ideas.*

- **Warm up activity:**
 - Read the class portions from the initial report and follow up investigation of the following bigfoot encounter in Orange County, NC...https://www.bfro.net/GDB/show_report.asp?id=921 . Several vital pieces of information should be missing(blanks).
 - Students are split into groups of 3 or 4.
 - Class is told that the group with the most facts (not rumors) to fill in the blanks at the end of the game is the winner.
 - Each group chooses 4 knowledge cards from a larger deck. Each card is labelled as a “fact” or a “rumor” The information on “fact” cards is completely true. The information on “rumor” cards may or may not be true.
 - Groups are given 10 minutes to share “facts” or “rumors” with the other groups if they wish (group members do not need to disclose whether what they are sharing is a “fact” or a “rumor”) and to build what they believe to be the full true story.
 - Groups take turns sharing all of the pieces of information that they believe are true to fill in the blanks on the original article (and may use rumors where necessary). Each team awards one other team of their choosing 1 point for being the most convincing when they convey their version of the “truth”. The teacher will then reveal the factual answers and award each team one point for each true statement and take away one point for each untrue statement.
- Debrief after warm up with the following during-lesson questions.
 - How could rumors about a story or event impact the way that it is reported?
 - What does it mean to be objective about a story or event?
 - What is the difference between an objective belief and a biased belief?
 - What is the relationship between knowledge and truth?

Explain - *Students communicate what they have learned so far and figure out what it means. This phase also provides an opportunity for teachers to directly introduce a concept, process, or skill to guide students toward a deeper understanding.*

- Ask Students the following during lesson questions:
 - What is “the news”?
 - How do we know if the news is true?
 - Who might disseminate fake news and why?
 - What are some challenges that you can foresee in attempting to tell the objective truth about a story?
- Students receive handout with simulation rules and available roles/jobs at each newspaper.
- Each student chooses a card from a deck that assigns them to work for one of four North Carolina newspapers listed below.
 - i. **The News & Observer** (4 staff members)
 - ii. **The Charlotte Observer** (4 staff members)
 - iii. **The Herald Citizen** (3 staff members)
 - iv. **The Fayetteville Observer** (3 staff members)
 - v. **The Citizen Times** (3-4 staff members)
- The object of the simulation is to earn the most resource chips for your newspaper by writing brief articles each round.
 - One newspaper article can receive between 1 and 3 resource chips each round for each of the categories below using a rubric.:
 1. Objectivity, accuracy & truth in reporting
 2. Purpose, supporting details and evidence
 3. Interesting or engaging writing
 4. Writing mechanics: Grammar, spelling, sentence and paragraph structure.
 - The **game board** is a map of North Carolina with gridded squares superimposed over the state’s shape. A building marker is placed on the square closest to where each newspaper is based in the state as their starting point for each round.
 - i. The first two larger newspapers have the advantage of an extra journalist and an extra resource chip to start with but the smaller papers have the advantage of having far more of the stories closer to their starting place which factors into travel time (which takes away from writing time).
 - **Possible Journalism roles at each newspaper** (students can switch roles between rounds. Groups do not necessarily have to fill every role at their newspaper.):

- i. **Reporter/photographer:** travels to the story location (on the gameboard) to get interviews and photos. "Email" info to writers and communications directors.
- ii. **Writer:** Writers actually write the article. Writers can begin writing, outlining and planning out the article as soon as they receive the article's topic and the influences/biases that they need to consider as they write.
- iii. **Editor:** Help keep writer on track of purposes and influences. Then edit the final story. The editor can take suggestions from other team members but they get the final say on what the article looks like.
- iv. **Communications director:** Reaches out to other papers to share information or disinformation with communications directors from other teams.

Elaborate —Allow students to use their new knowledge and continue to explore its implications. At this stage students expand on the concepts they have learned, make connections to other related concepts, and apply their understandings to the world around them in new ways

- Complete 1st round of game
 - Newspaper groups meet, decide on their individual jobs/roles at their newspapers, discuss rules, goals and potential strategies.
 - For round 1 each newspaper group receives one resource chip for every member of their staff. Resource chips will be awarded at this time in other rounds using the article rubric.
 - They must choose to buy either a news van for 2 resource chips (moves 1 square per minute) or a news helicopter for 4 chips (moves 2 squares per minute) at this time during round 1 to place on the game board.
 - All teams roll a 10 sided die for a story writing "influence" at this time and consult a chart to see what they get.
 1. Newspaper advertisers tell you to use this story to sell more papers no matter what it takes.
 2. The local mayor tells you not to write a scary or creepy article.
 3. An important friend of the newspaper owner wants the story to be funny.
 4. The local opinion is that this story is absolutely true, so some powerful citizens are pressuring you to not make them look foolish at all.
 5. The local police tell you that this story is definitely fake so you they are pressuring you to write it that way.
 6. The local visitor's bureau is asking you to write the story from a weird or creepy angle because that will attract more tourists.
 7. The newspaper owner wants this story to be as factual as possible. No opinions or sensationalism.
 8. The witness who gave you this information insisted that you make him or her seem very smart or you cannot use their testimony in your article.
 9. If you can make this story seem really exciting or sensational you will attract more readers and be able to get back some of the readers that your paper had recently lost.
 10. A local group of concerned parents think that this story is ridiculous so you should write it that way or they will complain to your newspaper advertisers.
 - Teacher announces the article topic and location to the whole class. (ex. The Beast of Bladenboro)
 - i. Writers can begin planning their articles at this time. Editors assist and discuss with them.
 - Each group now makes a "random events" roll with a 10-sided die.
 - i. Your van or helicopter needs repair: 1 resource chip
 - ii. Make 2 more random events rolls.
 - iii. Nothing happens. Proceed with your story
 - iv. One of your witnesses gets scared off by something. You only get one scoop card.
 - v. One of your advertisers leaves the newspaper. Pay 2 resource chips.
 - vi. A reporter from one of the other papers owes you a favor. You can take a look at 1 of any other team's scoop cards at any time in the next round.
 - vii. Your newspaper owes the next 2 resource chips that you earn to the bank.
 - viii. The owner of your newspaper owes the owner of one of the other newspapers a big favor. Choose another team and let them take a look at 2 of your scoop cards at some point in the round of their choosing.
 - ix. Roll for a second influence.
 - x. You may remove 1 influence.
 - Travel time- Reporters and Communications Directors travel to the location of the story (roll for movement each turn with better dice for helicopters and/or larger newspapers/give big papers a disadvantage to get them to reflect upon unfairness in influencing beliefs/truth?)
 - i. Each team starts on the square where their newspaper is located in the state. Vans move one square per minute and helicopters move 2.
 - ii. The two smaller newspapers have the advantage here. All/Nearly all of the possible news stories that we will cover are within one square on the gameboard of one of the smaller newspapers' locations.
 - Once a team's vehicle has arrived at the story location they draw two "scoop" cards that may be an interview, a police report, etc. about the story.
 - Reporters then "email" (share) the "scoops" with their staff writers. Writers discuss how to frame their articles with reporters and editors as they write (2-3 paragraphs or more per article).
 - Reporters can then roll for a possible third and/or 4th "scoop" card. Reporters can also choose to buy 1 or 2 "scoop" cards for 2 resource chips a piece at this time.
 - Comm. directors travel to other groups to share information and/or disinformation (which they make up) with other newspapers.

- Editors can read and change stories but other members can only voice opinions, strategies/editors get final say of what goes out).
- Debrief by asking the following questions at the end of each round:
 - What stood in the way of your readers receiving the objective truth?
 - How might what you wrote in your articles influence the beliefs of your readers?
 - What kinds of biased or objective beliefs about these topics might your readers develop if you are their sole source of news on this topic?
- Calculate points/resource chips earned using rubric and proceed with the next round.
- Repeat more rounds as time allows.

Evaluate: *This phase assesses both learning and teaching and can use a wide variety of informal and formal assessment strategies.*

- Teacher uses a rubric to assess each newspaper article for points awarded each round.
- At the end of the lesson students are provided a copy of the following questions:
 - What are the similarities and differences between sharing news and sharing knowledge.
 - What information would you use to support the view that biased beliefs can be contagious.
 - What is a one sentence statement that you can make about truth?
 - How might you evaluate the level of truth in a story?
 - What is the relationship between beliefs and truth?
 - How do beliefs shape truth?
- Students are directed to a shared google doc.
- Teacher shares the following directions (students have previously received secret numbers that only they and the teacher know):
 - Each student should roll a ten-sided die and answer questions next to their number on the google doc as directed.
 - i. answer questions a & b.
 - ii. answer questions b & c
 - iii. answer questions c & d
 - iv. answer questions d & e
 - v. answer questions e & f
 - vi. roll again
 - vii. answer question a and any other question of your choice
 - viii. answer question f and any other question of your choice.
 - ix. answer any two questions that you choose.
 - x. answer any question of your choice and ask your own question for the class to answer
- Allow students to discuss and reply to one another's answers/questions on the google doc.

Unexplained mystery topics and game resource articles:

- The Catsburg Ghost Train
 - <https://northcarolinaghosts.com/piedmont/catsburg-ghost-train/>
- Haw River Mermaids
 - <https://www.onlyinyourstate.com/north-carolina/mermaid-point-nc/>
 - <http://www.candidslice.com/cape-fear-river-folklore-chasing-north-carolinas-mermaids/>
- Greensboro UFO sighting
 - <https://www.charlotteobserver.com/news/local/article225239880.html>
 - <https://spectrumlocalnews.com/nc/triad/news/2019/01/30/video-of-ufo-over-greensboro-sparks-online-debate>
- Brown Mountain Lights
 - https://skepticalinquirer.org/2016/04/the_brown_mountain_lights_solved_again/?si/show/the_brown_mountain_lights_solved_again
 - <https://wlos.com/news/local/asu-scientists-capture-rare-images-of-wncs-brown-mountain-lights>
- Lake Norman mysterious underwater town:
 - <https://www.charlottestories.com/people-no-idea-towns-lake-norman-even-exist/>
 - <https://www.charlotteobserver.com/living/lake-norman-magazine/article9086441.html>
 - <http://www.boatwestportmarina.com/towns-waters-lake-norman/>
- Lake Norman Monster:
 - <https://www.charlotteobserver.com/news/local/article161637728.html>
 - <https://www.charlottestories.com/creature-resembling-loch-ness-monster-spotted-lake-norman/>
 - http://www.lakenormanmonster.com/monster-sightings/?doing_wp_cron=1554502169.0372099876403808593750
- The Beast of Bladenboro
 - <https://www.charlotteobserver.com/news/local/article198869839.html>
 - <https://www.starnewsonline.com/news/20061029/the-beast-of-bladenboro>
- Blackbeard's Ghost
 - <https://northcarolinaghosts.com/coast/blackbeards-ghost/>

Bigfoot Fact & Rumor Cards

| | | |
|--|---|---|
| <p>1. Fact: <u>which is about 8 feet off the ground, the plants are all smashed down like something repeatedly stood there.</u></p> | <p>1. Rumor: <u>which is about 8 feet off the ground, the plants are all smashed down like something repeatedly stood there.</u></p> | <p>1. Rumor: <u>I saw a dark shape moving quickly through the woods.</u></p> |
| <p>2. Fact: <u>He never picked up anything on the nightvision.</u></p> | <p>2. Rumor: <u>He never picked up anything on the nightvision.</u></p> | <p>2. Rumor: <u>He briefly saw a large human shape but it had to be at least 8 feet tall!</u></p> |
| <p>3. Fact: <u>it all suddenly ended and we haven't heard anything since.</u></p> | <p>3. Rumor: <u>it all suddenly ended and we haven't heard anything since.</u></p> | <p>3. Rumor: <u>some neighborhood children said they heard what sounded like two of them fighting in the woods!</u></p> |
| <p>4. Fact: <u>Nothing was found.</u></p> | <p>4. Rumor: <u>Nothing was found.</u></p> | <p>4. Rumor: <u>They found a few areas in the woods with trampled plants and twigs that could have been evidence of a large animal in the area but found nothing conclusive.</u></p> |

BIGFOOT WORKSHEET

Name: _____

Date _____

**Bigfoot/Sasquatch Encounter in Orange County, NC
Reported to the BigFoot Field Researchers Association**

Submitted by witness on Tuesday, August 24, 2004.

Rural residents disturbed by nighttime activity near Buffalo Creek

YEAR: 2004

SEASON: Spring

MONTH: April

STATE: [North Carolina](#)

COUNTY: [Orange County](#)

OBSERVED: In connection with report #8804, my house is approximately 5 miles south of this sighting. Throughout the spring of 2004, our neighborhood was disturbed regularly by something walking through the woods at night. Almost everyone in the neighborhood was affected, in that we would hear footsteps, twigs snapping, and one neighbor heard scratching on the side of the house. Outside my kitchen window,

1. _____ My neighbor sleeps with his bedroom windows open and hears it approaching in the middle of the night. The dogs in the area would absolutely go nuts! He has night vision and just as soon as he gets outside, he hears the footsteps slowly moving away. 2. _____

_____ In May 2004 I came home late, about midnight, and as I was exiting the car, I heard a the classic bigfoot scream way out in the distance, maybe half a mile away. In July, 3. _____

ALSO NOTICED: Outside of the dogs going wild almost every night and then suddenly everything became peaceful. No scents or feces noticed. I sat on my back porch one night and heard it coming through the woods. Shined a powerful spotlight into the woods, but didn't see a thing. If it is grey in color, I can understand why.

OTHER WITNESSES: Apparently about 6 neighbors affected.

OTHER STORIES: No

TIME AND CONDITIONS: 12:00am - 3:00am

ENVIRONMENT: Hardwood forests with open fields for tobacco. Small streams nearby. Lots of deer, rabbits, squirrels, and birds.

Follow-up investigation report:

The area of the activity is mostly hardwood forests interspersed with farms of various sizes. There are many tobacco farms in the area. Streams and ponds are abundant. There are quite a few houses, but the acreage per lot is quite large

On more than one occasion throughout the spring of 2004, the witness and his neighbors heard a two-footed creature walking through the woods. Dogs in the area would seemingly respond simultaneously to the animal by barking incessantly. In the words of the witness, "The dogs would go ape."

The witness did hear a scream one night that sounded very similar to a purported Bigfoot vocalization he had heard played on the Art Bell show. This scream came from a large wooded area (approximately 30 acres) in the back of his neighbor's property.

Neighbors in the area were also disturbed and had called the police to investigate.

4. _____.

There is no resident black bear population in Orange County. Over a thirty year period, the NC Wildlife Resources Commission reported one verified black bear sighting in the county.

I asked if any other animal could have been responsible for the disturbances. The witness said, "No way. The only other thing it could have possibly been was a person." The witness is positive it was two-footed. He is also familiar with the sounds of other animals. The duration of the activity (i.e. months) and its unusual nature leads the witness to consider that possibility to be negligible. Residents do not enter the woods except in the fall for hunting season. The witness also said, "There is zero chance of this being a prank or a joke."

The witness recently read report 8804 for Person County, which is relatively close to his residence. The proximity of that sighting and the unexplained disturbances in the spring prompted him to submit his report.

Retrieved from: https://www.bfro.net/GDB/show_report.asp?id=921

Bigfoot Answer Sheet

Submitted by witness on Tuesday, August 24, 2004.

Rural residents disturbed by nighttime activity near Buffalo Creek

YEAR: 2004

SEASON: Spring

MONTH: April

STATE: [North Carolina](#)

COUNTY: [Orange County](#)

OBSERVED: In connection with report #8804, my house is approximately 5 miles south of this sighting. Throughout the spring of 2004, our neighborhood was disturbed regularly by something walking through the woods at night. Almost everyone in the neighborhood was affected, in that we would hear footsteps, twigs snapping, and one neighbor heard scratching on the side of the house. Outside my kitchen window, 1. which is about 8 feet off the ground, the plants are all smashed down like something repeatedly stood there. My neighbor sleeps with his bedroom windows open and hears it approaching in the middle of the night. The dogs in the area would absolutely go nuts! He has night vision and just as soon as he gets outside, he hears the footsteps slowly moving away. 2. He never picked up anything on the nightvision. In May 2004 I came home late, about midnight, and as I was exiting the car, I heard a the classic bigfoot scream way out in the distance, maybe half a mile away. In July, 3. it all suddenly ended and we haven't heard anything since.

ALSO NOTICED: Outside of the dogs going wild almost every night and then suddenly everything became peaceful. No scents or feces noticed. I sat on my back porch one night and heard it coming through the woods. Shined a powerful spotlight into the woods, but didn't see a thing. If it is grey in color, I can understand why.

OTHER WITNESSES: Apparently about 6 neighbors affected.

OTHER STORIES: No

TIME AND CONDITIONS: 12:00am - 3:00am

ENVIRONMENT: Hardwood forests with open fields for tobacco. Small streams nearby. Lots of deer, rabbits, squirrels, and birds.

Follow-up investigation report:

The area of the activity is mostly hardwood forests interspersed with farms of various sizes. There are many tobacco farms in the area. Streams and ponds are abundant. There are quite a few houses, but the acreage per lot is quite large

On more than one occasion throughout the spring of 2004, the witness and his neighbors heard a two-footed creature walking through the woods. Dogs in the area would seemingly respond simultaneously to the animal by barking incessantly. In the words of the witness, "The dogs would go ape."

The witness did hear a scream one night that sounded very similar to a purported Bigfoot vocalization he had heard played on the Art Bell show. This scream came from a large wooded area (approximately 30 acres) in the back of his neighbor's property.

Neighbors in the area were also disturbed and had called the police to investigate. 4. Nothing was found.

There is no resident black bear population in Orange County. Over a thirty year period, the NC Wildlife Resources Commission reported one verified black bear sighting in the county.

I asked if any other animal could have been responsible for the disturbances. The witness said, "No way. The only other thing it could have possibly been was a person." The witness is positive it was two-footed. He is also familiar with the sounds of other animals. The duration of the activity (i.e. months) and its unusual nature leads the witness to consider that possibility to be negligible. Residents do not enter the woods except in the fall for hunting season. The witness also said, "There is zero chance of this being a prank or a joke."

The witness recently read report 8804 for Person County, which is relatively close to his residence. The proximity of that sighting and the unexplained disturbances in the spring prompted him to submit his report.

Retrieved from: https://www.bfro.net/GDB/show_report.asp?id=921

JOURNALISM SIMULATION: ROLES & ROLLS (Student Handout)

NEWSPAPERS AND THEIR COUNTIES

- 1) **The News & Observer** (4 staff members)- Home county: Wake
- 2) **The Charlotte Observer** (4 staff members)- Home county: Mecklenburg
- 3) **Durham Herald Sun** (3 staff members)- Home county: Durham
- 4) **The Fayetteville Observer** (3 staff members)- Home county: Cumberland
- 5) **The Citizen Times** (3-4 staff members)- Home county: Buncombe

JOBS AVAILABLE AT EACH NEWSPAPER

- **Reporter/photographer:** travels to the story location (on the gameboard) to get interviews and photos. "Email" info to writers and communications directors.
- **Writer:** Writers actually write the article. Writers can begin writing, outlining and planning out the article as soon as they receive the article's topic and the influences/biases that they need to consider as they write.
- **Editor:** Help keep writer on track of purposes and influences. Then edit the final story. The editor can take suggestions from other team members but they get the final say on what the article looks like.
- **Communications director:** Reaches out to other papers to share information or disinformation with communications directors from other teams.

INFLUENCE ROLLS

1. Newspaper advertisers tell you to use this story to sell more papers no matter what it takes.
2. The local mayor tells you not to write a scary or creepy article.
3. An important friend of the newspaper owner wants the story to be funny.
4. The local opinion is that this story is absolutely true, so some powerful citizens are pressuring you to not make them look foolish at all.
5. The local police tell you that this story is definitely fake so you they are pressuring you to write it that way.
6. The local visitors bureau is asking you to write the story from a weird or creepy angle because that will attract more tourists.
7. The newspaper owner wants this story to be as factual as possible. No opinions or sensationalism.
8. The witness who gave you this information insisted that you make him or her seem very smart or you cannot use their testimony in your article.
9. If you can make this story seem really exciting or sensational you will attract more readers and be able to get back some of the readers that your paper had recently lost.
10. A local group of concerned parents think that this story is ridiculous so you should write it that way or they will complain to your newspaper advertisers.

RANDOM EVENTS ROLLS

1. Your van or helicopter needs repair: 1 resource chip
2. Make 2 more random events rolls.
3. Nothing happens. Proceed with your story
4. One of your witnesses gets scared off by something. You only get one scoop card.
5. One of your advertisers leaves the newspaper. Pay 2 resource chips.
6. A reporter from one of the other papers owes you a favor. You can take a look at 1 of any other team's scoop cards at any time in the next round.
7. Your newspaper owes the next 2 resource chips that you earn to the bank.
8. The owner of your newspaper owes the owner of one of the other newspapers a big favor. Choose another team and let them take a look at 2 of your scoop cards at some point in the round of their choosing.
9. Roll for a second influence.
10. You may remove 1 influence.

REPORTER ROLLS

- **Reporters** can roll for a possible third and/or 4th "scoop" card.
 - i) Roll a 12 sided die. If you roll 5-8 you get a third "scoop" card. If you roll a 9-12 you get two new scoop cards.
 - ii) Reporters can also choose to buy 1 or 2 "scoop" cards for 1 resource chip a piece at this time.

REFLECTION QUESTIONS ROLLS

1. answer questions **A & B**.
2. answer questions **B & C**
3. answer questions **C & D**
4. answer questions **D & E**
5. answer questions **E & F**
6. **roll again**
7. answer question **A** and any other question of your choice
8. answer question **F** and any other question of your choice.
9. answer any two questions that you choose.
10. answer any question of your choice and ask your own question for the class to answer

“Scoops” for student groups for each topic:

- **The Catsburg Ghost Train scoop 1**

Catsburg Country Store sits on a quiet stretch of the Old Oxford Road in the north end of Durham. The Catsburg General store was, for years, a gathering place for locals to talk and buy everyday goods. The fading sign on the store remains a well-loved local landmark. This abandoned building with its distinctive painted sign was once run by Durham's longest-serving sheriff, Eugene "Cat" Belvin, who served in that role from 1928 - 1958.

Belvin earned his nickname "Cat" for his quick reflexes and quiet footsteps, which allowed him to creep up on the stills of the moonshiners who were still very active in the area during his tenure. Cat Belvin's motives may not have been entirely ones of law and order. Rumors persist to this day that his chief reason for taking up the badge was to have the power to shut down the rivals to his own illegal moonshining business.

- **The Catsburg Ghost Train scoop 2**

Cat Belvin's family owned the Catsburg Country Store until it closed in the 1980s. But it's the railroad tracks that run close to the store that hold the stories of a haunted train still running the tracks.

The story behind the light tells of a man who was killed when walking on the tracks late at night. Ever since then, that accident seems to be replaying itself again and again on those abandoned tracks near the Catsburg store.

- **The Catsburg Ghost Train scoop 3**

It's said that every so often on a moonless night a mysterious light, like that of an oncoming train, will appear in the woods down the rails from the store. The sound of a train whistle and an engine running can be heard when the light appears, but the light itself never seems to move. It just hangs in the air for some time and then fades away into the darkness. Some even say that at times you can see the ghost of that man who lost his life to that train. His, headless, shadowy form can be seen walking up and down the tracks, looking for his lost head.

- **The Catsburg Ghost Train scoop 4**

Whether you see the ghost or not, it's worth a little side trip the next time you're in Durham just to see the fading, hand-painted sign on the Catsburg Country Store building. Since it ceased operating, the building has fallen into sad disrepair, and despite the efforts of locals interested in preserving the building for its historic significance, the Catsburg Country Store soon may be no more.

- **Haw River Mermaids scoop 1**

Located about 30 miles to the Southeast of Raleigh, at the mouth of the Cape Fear River, there's an unexpectedly magical place where mermaids have been spotted. It's called Mermaid Point.

You'll find it just beyond the end of River Point Road in Moncure (near Haywood). It's where the Deep River and the Haw River meet to form the mouth of the Cape Fear. (The Cape Fear runs all the way to the Atlantic.)

- **Haw River Mermaids scoop 2**

Some eyewitness accounts of the mermaids at Mermaid Point date all the way back to the middle 1700s when there was a tavern located nearby. In the wee hours of the morning, patrons would make their way home along the banks of the river — passing right by Mermaid Point.

Back then, and before the modern construction of locks and dams along the Cape Fear, there was a big sandbar off the point of land where the two rivers meet. It's long since been covered up by rising waters created by the dams.

- **Haw River Mermaids scoop 3**

Mermaids have long been argued by naysayers as simple folklore. Whether they exist, or not, depends upon what you believe. But the men walking home in the wee hours of the morning from that tavern (it burned in the 1800s) stood by what they saw at Mermaid Point.

- **Haw River Mermaids scoop 4**

You may wonder why in the world the mermaids would swim so far upstream. Afterall, Mermaid Point is located a fair amount of distance from the ocean.

Any woman knows that salt isn't good for your hair — and the mermaids knew it too. They swam (and possibly still swim?!) all the way to Mermaid Point to wash and comb the salt from their long locks.

- **Lake Norman Monster Scoop 1**

In a July 14 posting on the official LakeNormanMonster.com website, a diver from Clemmons claims to have seen an “enormous” fish in the lake 20 years ago. The diver, who didn’t give a name, said he was looking for old bottles among the buildings that were submerged when the lake was first created.

Adding to the creepiness factor: His light found the fish in the black waters inside one of those submerged buildings, he wrote.

“It was ... at least 8 feet long and 3 feet across the mouth,” posted the diver. “We hovered in the water for a good 5 minutes with our lights on it, not believing what we were seeing. I’ve never seen a freshwater fish that big. ... The only thing it did was to pump its gills and open and shut its mouth slowly, like it didn’t even see us.”

- **Lake Norman Monster Scoop 2**

Speculation of the possible origin of the fabled “monster” has increased in the past week, after a website called CryptoZoology.com reported a 35-year-old Mecklenburg County man claimed he saw a “dinosaur-like creature” two weeks ago while traveling on a boat with friends.

The man described the creature as “splashing around in the water,” 10 feet long and reminiscent of the mythical Loch Ness monster. It was visible for about a minute before dropping below the surface, he told the website.

- **Lake Norman Monster Scoop 3**

A few dozen witnesses have posted sightings on LakeNormanMonster.com. Descriptions range from a dinosaur-like monster to a giant snake with fins ... and thick whiskers.

Most describe the creature, called Normie, as looking like the famed Loch Ness monster that allegedly inhabits [Loch Ness](http://LochNess) in the [Scottish Highlands](http://ScottishHighlands).

A page is devoted to The Lake Norman Monster on the website UnknownExplorers.com, which notes there is no physical evidence to support the existence of a monster living in Lake Norman. The site speculates the sightings could involve a giant catfish or alligator gar.

“Descriptions of Normie vary from sighting to sighting, and range from a crocodilian like creature to the more classic three humped serpent,” says UnknownExplorers.com. “Most that have seen the Lake Norman Monster seem to agree that the beast is more fish like, with a slender body, thick whisker like appendages, flippers and a ragged looking dorsal fin.”

- **Lake Norman Monster Scoop 4**

"I was on a boat with my friends," the man told Crypto Zoology. "We were near the lakes main channel when we saw something splashing around in the water."

The man and a few of his friends spotted the creature while boating around the southern part of Lake Norman. He said that it was about 10-foot-long and reminded him of the mythical Loch Ness monster.

There have been [hundreds of sightings](#) of a large dinosaur-like creature in Lake Norman ever since the it was first dammed up in 1963. The website [LakeNormanMonster.com](#) includes an average of about 4 documented sightings every year since 2010

"Descriptions of Normie vary from sighting to sighting and range from a crocodilian like creature to the more classic three humped serpent, though most that have seen the Lake Norman Monster seem to agree that the beast is more fish like, with a slender body, thick whisker like appendages, flippers and a ragged looking dorsal fin. Legendary Lake Monster investigator, and founder of the Global Underwater Search Team, GUST, Jan Ove Sunberg, has even expressed interest in the Lake Norman Monster."

- **Lake Norman Underwater Town scoop 1:**

Beneath the waters of Lake Norman lies huge sections of some of North Carolina's most unique towns from the past. Although over half a century has passed, many roads, facilities, and even homes still sit eerily undisturbed beneath the water.

The East Monbo and Long Island cotton mills, were originally shut down in the 50s, to make way for Lake Norman – the largest man-made lake in North Carolina. At the time, each mill employed about 120 people, who worked, lived, and played in mill villages that were within walking distance of the mills.

- **Lake Norman Underwater Town scoop 2:**

Workers from both mills were given the option to own their homes free of charge if they were able to pay for the homes to be moved outside of the flooded area – homes that were not moved were demolished and flooded.

In addition to the homes, several roads, out-buildings, and even grave-sites now sit quietly at the bottom of Lake Norman.

- **Lake Norman Underwater Town scoop 3:**

Davidson College launched Under Lake Norman, an ongoing project to collect stories, photos and other information about what lies beneath the surface of the lake. When Duke Energy created the lake in 1963, the power company flooded thousands of acres, putting plantations, bridges, mills and home sites underwater. Below are some of Under Lake Norman's more notable discoveries.

Cotton Mills The East Monbo and Long Island cotton mills, both owned by Duke Power, were shut down a few years prior to the flooding and formation of Lake Norman. At the time, each mill employed about 120 people, most of who lived in nearby mill villages. Workers were offered their homes free of charge if they could pay to move the home outside of the flood area. The houses that were not moved were demolished. While most of the machinery from the two mills was removed prior to flooding, some of the bigger machines, which were bolted to the floor, remained, and now reside underwater.

- **Lake Norman Underwater Town scoop 4:**

Family Cemeteries Duke Power moved multiple family cemeteries to make way for Lake Norman. In some cases, after obtaining permission from family descendants, only the headstones were moved while the remains were not disturbed. To inform the public about what it was doing, Duke Power published a 46-page document that indicates seven family cemeteries were moved, as well as a single grave that belonged to John Abernathy who, according to the headstone, died in 1816 at the age of 63. On November 23, 1958, an unknown person removed the gravestone from the gravesite. A year later a descendant of Abernathy consented to allow Duke Power to relocate Abernathy's remains to the Hills Chapel Cemetery in Stanley. A number of years later, the original gravestone turned up in the possession of an Abernathy descendant. Ultimately, the original gravestone was placed at the Unity Presbyterian Church Cemetery in Catawba Springs, giving John Abernathy two separate gravesites and two headstones.

- **Greensboro UFO sighting scoop 1:**

Folks online are trying to determine the strange object in the skies just outside of Greensboro, captured in a video posted over the weekend.

- *The video was taken by Bret Jones, who enjoys snapping pictures of birds.*
- *He initially described the object as a strange light in the sky near a plane.*
- *Some people argue it's just a balloon, but Jones says the flashing silver and gold lights make him think otherwise.*

- **Greensboro UFO sighting scoop 2:**

He initially described the object as a strange light in the sky near a plane.

"I just saw this flash in the corner of my vision. I look over and there's a plane and I saw the flash again, but it was just near it. I already had my camera strapped to me and I started trying to capture it," he said. "I told my wife I just saw a UFO and she said 'oh yeah, again?' but then I look at the video and scroll and I was just like I have no idea what that is!"

Some people argue it's just a balloon, but Jones says the flashing silver and gold lights make him think otherwise.

"If I see evidence that it's indisputable for me that it would be balloon then yeah I would say it's just a balloon. But after 10 seconds, I couldn't see it in the sky anywhere. Why would a balloon, if it was just twisting around, why wouldn't I see it again," he said?

- **Greensboro UFO sighting scoop 3:**

A "random flashing" object in the sky outside Greensboro, North Carolina, has ignited an ongoing debate on social media, including claims others have seen the same mystery object.

A "pill-shaped" object was seen soaring through the sky and producing a series of flashes.

Bret Jones, known as SpaceBret on YouTube, explains that the "weird thing" was spotted Friday, Jan. 25, while he was trying to film birds outside Greensboro.

- **Greensboro UFO sighting scoop 4:**

"I saw a similar object in Winston Salem on the 25th, in the late afternoon!" [posted Julia Hejnar on YouTube](#). "It happened so fast. It blinked out just like that!"

"I have seen this flash at night for the past year now," [posted SkyHound, in response to the video](#).

"I...clearly know the difference between planes, satellites, iridium flares, meteorites, helicopter, etc. This is different...It seems to flash incredibly bright with no pattern. It even fades out into a dull red light occasionally."

North Carolina has been the scene of reported [UFO sightings](#) for decades, though some have later been [explained away as commercial blimps](#) or military aircraft, reported the Charlotte Observer last year.

| | | |
|---|---------------------|---|
| TEACHER NAME | | Lesson # |
| Ethan Montgomery | | 3 |
| MODEL | CONTENT AREA | GRADE LEVEL |
| Creative Problem Solving | ELA/Social Studies | 4th |
| CONCEPTUAL LENS | | LESSON TOPIC |
| Belief | | N.C. Ghost Stories |
| LEARNING OBJECTIVES <i>(from State/Local Curriculum)</i> | | |
| <p style="text-align: center;">Social Studies</p> <ul style="list-style-type: none"> 4.H.1.3 Explain how people, events and developments brought about changes to communities in various regions of N.C. 4.C.1.2 Explain how the artistic expression of various groups represents the cultural heritage of North Carolina. <p style="text-align: center;">ELA</p> <ul style="list-style-type: none"> RL.5.9 Compare and contrast stories in the same genre (e.g., mysteries and adventure stories) on their approaches to similar themes and topics. RI.5.3 Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text. RI.5.8 Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s) SL.5.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 5 topics and texts</i>, building on others' ideas and expressing their own clearly. | | |
| THE ESSENTIAL UNDERSTANDING <i>(What is the overarching idea students will understand as a result of this lesson?)</i> | | THE ESSENTIAL QUESTION <i>(What question will be asked to lead students to "uncover" the Essential Understanding)</i> |
| <i>Beliefs shape truth</i> | | <i>How do beliefs shape truth?</i> |
| CONTENT KNOWLEDGE <i>(What factual information will students learn in this lesson?)</i> | | PROCESS SKILLS <i>(What will students be able to do as a result of this lesson?)</i> |

| | |
|---|--|
| <ul style="list-style-type: none"> • Belief is a trust, faith or confidence in someone or something. • John Harden was and is a respected NC figure who has had a positive influence on our state but who was also fascinated with ghosts and the supernatural. • The word ghost can mean the spirit of a dead person, sometimes represented as a pale, almost transparent image of that person that some people believe appears to people who are alive. • Bias means a preconceived opinion or belief that is in favor of or against a person, place or thing that is not based in reason. • Influences are people, places or things that have the power to change behavior, belief or opinion of a person or persons. • A truth is a fact or belief that is accepted as true. • Local ghost stories are part of our N.C. cultural heritage. | <p>Students will be able to</p> <ul style="list-style-type: none"> • evaluate • analyze • make generalizations • draw conclusions • make choices based on reasoned argument • compare and discriminate between ideas |
|---|--|

GUIDING QUESTIONS
What questions will be asked to support instruction?
Include both "lesson plan level" questions as well as questions designed to guide students to the essential understanding

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|------------------------------|---------------------------------|-------------------------------|
| Pre-Lesson Questions: | During Lesson Questions: | Post Lesson Questions: |
|------------------------------|---------------------------------|-------------------------------|

| | | |
|--|--|---|
| <ol style="list-style-type: none"> 1. Who was John Harden? 2. In what ways did his work affect his community and generations of North Carolinians. 3. What do you think that John Harden’s beliefs were regarding ghosts? 4. How might people think about ghosts other than having a belief that they are real or not real? 5. What do you believe is happening when people claim to see ghosts and other strange phenomenon? 6. How might “truth” be related to believing ghosts are real or not? 7. What is a true statement that you can make about ghosts? 8. What is the difference between “belief” and “truth”? | <ol style="list-style-type: none"> 1. What do all of these stories have in common? 2. What is a challenge, issue or problem associated with these and other ghost stories and encounters? 3. Which of these problems can be combined or are under the same category? 4. Which of these problems/challenges are we most interested in attempting to solve? 5. Which of these problems or challenges might we be able to solve in class today as we examine these and other NC ghost stories? 6. What are all of the facts or truths about this challenge that you can think of? 7. What similar ideas or facts do you see? 8. What are some categories that we could make to group these facts/truths? 9. What category of facts might we want to focus on as we create our problem statements? 10. What sort of problems might you run into while carrying out your solution? 11. What criteria should you consider as you determine the success of your solution? 12. How will friends, family members, teachers and others accept our solution and findings? 13. What other kinds of resistance might there be to our solution and findings? 14. Where might you be able to find assistance in solving your problem? | <ol style="list-style-type: none"> 9. How do the beliefs of the writers or witnesses influence their views of these stories? 10. How might the beliefs of the writers or witnesses shape the beliefs of others? 11. How do your beliefs influence your opinion or explanation of these stories? 12. How would you know that your beliefs are true? 13. In what situations could 2 people have 2 versions of the truth? 14. What is the relationship between beliefs and truth. 15. How do beliefs shape truth? |
|--|--|---|

DIFFERENTIATION
(Describe how the planned learning experience has been modified to meet the needs of gifted learners. Note: Modifications may be in one or more of the areas below. Only provide details for the area(s) that have been differentiated for this lesson.

| | | | |
|---------|---------|---------|----------------------|
| Content | Process | Product | Learning Environment |
|---------|---------|---------|----------------------|

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| <p>-Sophisticated vocabulary. -Most of the texts are intended for advanced readers. -5th grade ELA standards applied</p> | <p>-Rigorous questioning posed as a part of this lesson is at the higher end of Bloom's Taxonomy.</p> | <p>-products will vary based on student interest and choice.</p> | |
|--|---|--|--|

PLANNED LEARNING EXPERIENCES

(What will the teacher input? What will the students be asked to do? For clarity, please provide detailed instructions)

Engage and Connect - *This phase focuses on piquing students' interest and helping them access prior knowledge. This is the introduction to the lesson that motivates or hooks the students.*

- Around the room display images of and related to the life and work of John Harden, author of *The Devil's Playground*, *Tar Heel Ghosts* and old time NC radio storyteller (*Tales of Tarhelia on WPTF in Raleigh from 1946-47*), accompanied by short blurbs/passages from his biographical entries at <https://www.ncpedia.org/biography/harden-john-william> and <https://finding-aids.lib.unc.edu/04702/> as well as a few reviews and responses to his books and old radio program at Amazon and other online booksellers.
- Ask students the pre-lesson questions
 - a. Who was John Harden?
 - b. In what ways did his work affect his community and generations of North Carolinians.
 - c. What do you think that John Harden's beliefs were regarding ghosts?
 - d. How might people think about ghosts other than having a belief that they are real or not real?
 - e. What do you believe is happening when people claim to see ghosts and other strange phenomenon?
 - f. How might "truth" be related to believing ghosts are real or not?
 - g. What is a true statement that you can make about ghosts?
 - h. What is the difference between "belief" and "truth"?

Explore - *In this phase, the students have experiences with the concepts and ideas of the lesson. Students are encouraged to work together without direct instruction from the teacher. The teacher acts as a facilitator. Students observe, question, and investigate the concepts to develop fundamental awareness of the nature of the materials and ideas.*

1. **Mess Finding**

- a. Students should be split into groups of 3 or 4 and each group is given copies of a different story from John Harden's book *Tar Heel Ghosts* https://books.google.com/books/about/Tar_Heel_Ghosts.html?id=HRle-5WGZZoC. Each group should read and discuss their N.C. ghost story. Groups then summarize their story and share their thoughts about it with the class.
- b. Ask the following during lesson questions:
 - i. What do all of these stories have in common?
 - ii. What is a challenge, issue or problem associated with these and other ghost stories and encounters?
- c. Students are instructed to first think divergently, passing no judgement about the ideas of other students. Students should be encouraged to consider wild ideas and feel free to wish and dream as they consider potential problems or challenges that still need to be solved about ghosts and ghost encounters. Teachers should record ideas and encourages multiple viewpoints to be thoroughly examined.
- d. As the conversation begins to slow down, ask students to consider the following during lesson

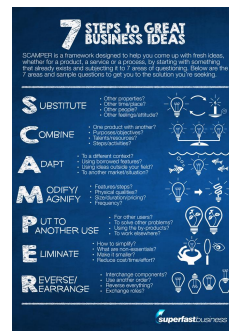
questions:

- i. Which of these problems can be combined or are under the same category?
 - ii. Which of these problems/challenges are we most interested in attempting to solve?
 - iii. Which of these problems or challenges might we be able to solve in class today as we examine these and other NC ghost stories?
- e. Teacher records the challenge/problem chosen by the class.

Explain - Students communicate what they have learned so far and figure out what it means. This phase also provides an opportunity for teachers to directly introduce a concept, process, or skill to guide students toward a deeper understanding.

2. Data Finding

- a. Students are instructed to return to their groups and each group is given a piece of chart paper and a set of markers.
 - b. Groups are given 5-8 minutes to record as many answers to the following questions as possible:
 - i. What are all of the facts or truths about this challenge that you can think of?
 - c. Students should be advised to think creatively, considering each of their 5 senses to find all of the who, what, when, where, why and how questions associated with this challenge that will reveal all of the relevant facts. Students should be told to go beyond the obvious facts about this challenge and not to argue or dispute any facts that they disagree with at this point.
 - d. After the time is up, students post their charts on the board.
 - e. The teacher asks the following questions:
 - i. What similar ideas or facts do you see?
 - ii. What are some categories that we could make to group these facts/truths?
 - f. Explain to students that they will be returning to their groups as they attempt to define the chosen problem by creating a problem or challenge statement but first ask this question:
 - i. What category of facts might we want to focus on as we create our problem statements?
 - g. Explain to students that they should consider whether our problem is the root problem or merely a symptom or outcome of the real problem and if it is the root problem then they should rephrase, define and clarify the problem, perhaps starting with “In what ways might we.....”
- Share a handout that introduces the **SCAMPER** concept of idea generation.



3. Idea finding

- a. Groups share one agreed upon problem statement that they wish to solve and then regroup to brainstorm ideas/potential solutions to their challenges. Groups are given :20 minutes to record as many solutions to their problem as possible. Students should again be instructed to use divergent thinking, withholding judgement of ideas and allowing their ideas to flow freely and stretch their thinking beyond the obvious and should not move on from proposing solutions until after the 20 minutes is up.

Elaborate —Allow students to use their new knowledge and continue to explore its implications. At this stage students expand on the concepts they have learned, make connections to other related concepts, and apply their understandings to the world around them in new ways

4. Solution Finding

- a. Next students should examine their list of ideas, evaluating them by asking themselves which ideas are possible/plausible and which would be impossible or too difficult. Can their ideas be put into use during our time in class? Do we have everything that we need? Is it too hard? What should be our criteria for success?
- b. Ask groups the following questions about their chosen solutions before they present them to the class:
 - i. What sort of problems might you run into while carrying out your solution?
 - ii. What criteria should you consider as you determine the success of your solution?

5. Acceptance Finding

- c. Groups should consider the following questions before forming their action plan:
 - i. How will friends, family members, teachers and others accept our solution and findings?
 - ii. What other kinds of resistance might there be to our solution and findings?
 - iii. Where might you be able to find assistance in solving your problem?
- d. Student groups next attempt to make their solutions workable by asking who, what, when, where, why and how questions regarding their solution.
- e. Next groups create a step-by-step action plan for carrying out their solution along with criteria that they will use to evaluate their solution after each story or experience that they encounter.
- f. Groups should put their plan into action for the ghost stories that they have already read. They are then provided with laptops and instructed to use their plan to approach their challenge associated with ghost stories as they explore more ghost stories/encounters on the following websites and beyond:
 - i. <https://spectrumlocalnews.com/nc/triangle-sandhills/Halloween/2018/10/24/10-places-in-north-carolina-that-are-reportedly-haunted>
 - ii. <https://www.northcarolinaghosts.com/>
- g. Students should be instructed to continue to evaluate the effectiveness of their chosen solution with each story that they encounter for success using their predetermined criteria.

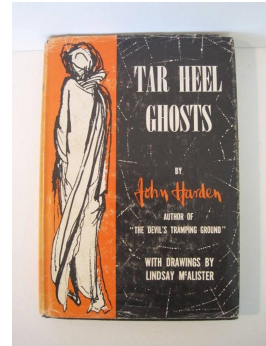
Evaluate: *This phase assesses both learning and teaching and can use a wide variety of informal and formal assessment strategies.*

- a. Student groups should share their solutions and results at this point.
- b. Ask the following post lesson questions:
 - i. How do the beliefs of the writers or witnesses influence their views of these stories?
 - ii. How might the beliefs of the writers or witnesses shape the beliefs of others?
 - iii. How do your beliefs influence your opinion or explanation of these stories?
 - iv. How would you know that your beliefs are true?
 - v. In what situations could 2 people have 2 versions of the truth?
 - vi. What is the relationship between beliefs and truth.
 - vii. How do beliefs shape truth?
- c. Ask the class what they know about ectoplasm. Let students share what they know and if students are not aware of the dictionary definition offer this one *“a supernatural viscous substance that is supposed to exude from the body of a medium during a spiritualistic trance and form the material for the manifestation of spirits”*. Explain to the students that you will be having an ectoplasm ball fight in the dark.
- d. Students are each assigned a secret number which you have already determined.
- e. Each student is instructed to answer the following question on a piece of paper that has been painted with glow in the dark paint and left to charge during class (their secret number should be written on one of the corners) using **ghost stories as a subject**: *I used to think _____ but now I understand _____.*
- f. Students should crunch/ball up their paper and put it on the center of their desks when finished.
- g. The teacher turns out the lights for about 20 seconds while all of the students make ghostly noises and throw their “ectoplasm” balls across the room. The teacher turns the lights back on and

students find a ball that landed near them and/or share with those that don't. Those students then unravel their new "ectoplasm" balls and either ask the original author a question about their statement or write their own "I used to think___ but now I understand____" statement in response to the first one. Students should write their secret number each time that they record a question or statement.

- h. Process can then be repeated several more times followed by returning spooky snowballs to the original author and then collected by the teacher on the way out the door.

John William Harden Pictures



John William Harden Biographical and book review blurbs

John William Harden, newspaperman, publicist, and author, was born in Graham, the son of Peter Ray and Nettie Cayce Abbott Harden. Upon graduation from high school he became circulation and advertising manager for the *Burlington Daily Times* as well as news editor for the Graham news department. In 1923 he was classified advertising manager for the *Raleigh News and Observer*, but in the fall entered [The University of North Carolina](#). In Chapel Hill he worked under Bob Madry, head of the university news bureau. Following his graduation in 1927, he joined the *Charlotte News* as a reporter and columnist and in 1937 became news editor of the *Salisbury Evening Post*, where he remained until 1944. Moving to Greensboro, he became executive news editor of the *Daily News* of that city.

In 1944 Harden was named director of public relations in the gubernatorial campaign of [R. Gregg Cherry](#). After Cherry's inauguration, Harden was appointed executive secretary to the governor. While living in Raleigh, he moderated a series of programs on radio station WPTF on "Tales of Tar Heelia." Drawing from his personal file of ghost stories and mysteries, he continued this program for eighteen months during 1946–47. Out of this grew two books, *The Devil's Tramping Ground and Other North Carolina Mysteries* (1949) and *Tar Heel Ghosts* (1954), both published by The [University of North Carolina Press](#).

Resigning his post in the executive office, in 1948 Harden became head of public relations in the reelection campaign of U.S. Senator [William B. Umstead](#). After the election he joined Burlington Mills Corporation as director of public relations and shortly afterwards was made assistant-vice president. Leaving Burlington Mills in 1958, he undertook pioneer work in the state when he formed his own public relations firm, John Harden Associates, in Greensboro. A year later he was engaged by the [North Carolina Department of Conservation and Development](#) to lead a tour of North Carolina business and state representatives through western Europe, and in 1971 he assisted [Cannon Mills Company](#) of Kannapolis as director of public relations. Harden received wide recognition for his work in public relations. After selling his company in 1981, he continued in an advisory capacity until his death while working at his desk.

On 13 June 1928 Harden married Josephine Holt; they were the parents of Glenn Abbott and John William. Mrs. Harden died in 1951, and two years later he married Sarah Plexico. They were the parents of twin sons, Holmes Plexico and Mark Michael, and of Jonathan Holder.

Harden was a Democrat and an Episcopalian. He worked with the Greensboro Council of the Boy Scouts of America, the Carolina Regional Theater, and the North Carolina Historic Preservation Society. He also served as chairman of the 1951 campaign of the North Carolina League for Crippled Children and in 1955 was president of the General Alumni

Association of The University of North Carolina. Harden was also the author of *Alamance County: Economic and Social* (1928) and *North Carolina Roads and Their Builders*(1966).

I just love this book. I am a 50 something who grew up in the old north state. When I was coming along, just about everybody in the fifth or sixth grade read this book and *The Devil's Tramping Grounds* both by John Harden.

Both of these books are a collection of short descriptions of factual descriptions of the tales of Ghosts and mysterious phenomenon in North Carolina. Many of these tales have been handed down since the 1700's and 1800's. Others are historical histories of strange phenomenon that still are around today like the Brown Mountain Lights and the Devil's Tramping Grounds.

I really enjoyed them as a child so I decided to reread them again. In going back over them I discovered that the stories are taken from a radio show that John Harden had back in the forties. This made the book all the more interesting as I am able to see these stories and North Carolina itself through the eyes of someone from sixty years ago when life was simpler and probably more enjoyable.

*Great stories for those of us from North Carolina who can appreciate the history and lore of this great state. Loved this book when I was growing up. Glad to still see it available after all these years. Now I can share these spine tingling tales with my children too.

*This was one of the books in my elementary school library that I would check out over and over again. I've always been fascinated by "true" stories of ghosts, especially in my home state of NC. If you're a fan of the paranormal, North Carolina, or both then you'll probably enjoy this.

John William Harden (1903-1985) of Greensboro, N.C., was a journalist, newspaper editor, author, advisor to North Carolina governors and textile executives, and founder of the state's first full-service public relations company.

Harden published *The Devil's Tramping Ground and Other North Carolina Mystery Stories* in 1949 and *Tar Heel Ghosts* in 1954. These books present stories gathered by Harden that deal with North Carolina locales, myths, and stories. *Devil's Tramping Ground* grew out of a weekly radio program, entitled *Tales of Tarheelia*, presented over eighteen months on station WPTF in Raleigh in 1946-1947. Both books were illustrated by Lindsey McAlister, an acquaintance of Harden's daughter Glenn Abbott, and were published by the University of North Carolina Press.

The Little Red Man



WINSTON-SALEM—OR at least the Salem side of that W hyphenated city—has a ghost that is held in most affectionate esteem. The ghost has a Moravian background which may further account for its popularity in that fine and mellow section of Winston-Salem.

John Fries Blair, who helped me assemble the story of the Little Red Man, hastily pointed out a queer angle to this best-known of the Salem ghosts. It has no connection with crime or mystery, and any first-rate ghost should have one or the other of these as a foundation.

The stage can best be set for the Little Red Man by turning briefly to the early days of Unitas Fratrum (Unity of Brethren) more commonly known as the Moravian church. The congregation was launched in 1457 by the followers of a Bohemian reformer and martyr, John Hus. It spread to America in 1735, and to North Carolina in 1753.

In 1752 Bishop Spangenberg made an adventurous trip from the church's settlement in Pennsylvania to North Carolina to explore the wilderness in search of a new home for The Brethren and to select a site for a proposed Moravian

settlement. Bishop Spangenberg found what he wanted and purchased 98,985 acres of land, called the Wachovia tract, for Unitas Fratrum. It covered two-thirds of present-day Forsyth County. Salem, the chief Moravian town, was eventually united with the neighboring Winston, to form the city that today bears the double name.

It was a characteristic of this church group that they kept careful records and this means that excellent archives exist today, dating back to 1752. These records show that the first colony arrived in North Carolina in November, 1753, and took up abode in an abandoned log hut near one of the "three forks of Muddy Creek," a distinguishing feature of what was to become Salem.

The contribution that this group has made, through all its subsequent generations, to the religious, cultural, educational, and business life of North Carolina is a story in itself and one that would take many volumes. Here we are concerned with the ghosts of that fine and consecrated group. And let it be hastily added that some of the Moravians are sensitive about their own best-known ghost, for the reason that they don't believe in ghosts and never have. But the story of the Little Red Man persists and makes the rounds just the same.

To pinpoint more closely the locale of the Little Red Man: he had his abode in and about the Brothers House. Now the Brothers House was the place of residence for the unmarried members of the religious colony. It still stands and is today used as a residence. Its construction was started in 1786, fifteen years after the Moravians came to the Wachovia tract. At that time Salem was a communal settlement where everyone labored for the welfare of the church alone. The sturdy old structure designed to house the single men of the

community was constructed with thick walls made "to withstand time and sorrow," as one historian of the church put it.

In the Brothers House the single men worshipped, slept, ate, labored, and "sung away the years with amazing little discord." The two upper floors were for sleeping, eating, and work. Then there was a "first basement" and a sub-basement, which has always been referred to as the "deep cellar." Because of the sloping nature of the terrain there, the first basement is only half a story high at the back. It contained the Brothers' kitchen and additional workshops. Beneath this first basement was the cavernous "deep cellar," gloomy and vaulted. Throughout the house (except in the cellar) the thick walls provided deep window ledges, which in themselves offer more storage space than is found in most modern homes.

The kitchen has a curving white expanse of ceiling, and its floors are great slabs of stone. A hood overhangs the large fireplace. A deep bake oven with a furnace extends from the side of the fireplace and has great copper pots permanently set in mortar.

Long after this building ceased to be a Brothers House, and in more recent years, these copper pots were used by the women of the church for some of the more elaborate of their so-called "candle teas." Here they melted the ingredients and molded candles for their Christmas Eve love feast. One of the favorite entertainments at these "candle teas" was the ritual of telling the story of The Little Red Man.

Who is the Little Red Man? The actual happenings that brought on this popular Moravian ghost are dutifully and factually recorded in the archives of the church. As a mortal he was one of the Moravian Brothers and his name was

Andreas Kremser. He was born in 1753 and died in 1786 at the age of thirty-three. In life he was at intervals the town chimney sweep, a kitchen worker, and finally a shoemaker. Volume IV of *Records of the Moravians in North Carolina*, a publication of the North Carolina Historical Commission (page 1597), refers to Kremser the chimney sweep in connection with some official discussions of the condition of Salem's chimneys. Kremser was criticized for his work, the suggestion being made that a more energetic man was needed for the job. The record of these discussions indicates that an epidemic of measles in the community was blamed on the fact that the chimneys were not clean. As the church and community leaders criticized Kremser's work, he in turn criticized the construction of the chimneys. He also contended that too much was expected of him and that the chimneys should be divided up among more sweeps. This situation undoubtedly led to the change in trades. His kitchen service was recorded as having been rendered in the cuisine area of the Brothers House.

The death of one Andreas Kremser is officially noted in the church Book of Salem Congregation, entry No. 45. Here is the record:

"The Single Brother, Andreas Kremser, departed early in the morning of March 26th, in the Brothers House here, and was buried on the 27th in our God's Acre.

"He was born March 7th, 1753, in Gnadenhutzen in Pennsylvania, and from his third year was brought up in the home and school for little boys, first in Bethlehem and then in Nazareth.

"In October, 1766, he came to North Carolina. In Bethabara he worked as a shoemaker, and on Feb. 6, 1772, he moved to Salem.

"On the 25th of March, 1786, he attended the festal services of the congregation and of his choir, but was uncommonly quiet all day. After the evening service several of the Brethren decided to work for a while on excavating the cellar for an addition to the Brothers House. They used the method which has been employed successfully in similar cases—that is, they undercut a bank and pulled down the overhang. Several Brethren doubted the advisability of doing that here, because of the more sandy character of the soil, but few agreed with them.

"About half past eleven Brother Kremser was warned by a Brother who found him kneeling at his work, but he could not see the danger. About twelve o'clock, midnight, a Brother who was watching overhead saw that a great bank was breaking, and called to the men below to jump back, which they did, and no one was much hurt except our Brother Kremser, who could not get away quickly because he was on his knees. He was covered by the falling earth and quite buried in it. He was dug out as quickly as possible, and was then still alive, and spoke, complaining of pain. It was evident that his left leg was broken. The doctor, Brother Lewis, opened a vein in his arm, but little blood flowed, and there were soon signs of his approaching departure, which followed about two o'clock, the blessing of the Church having been given to him among many tears."

Kremser, small of stature, was wearing a red jacket when the bank caved in on him.

This fatal accident in the midnight hour made a deep impression on the men living in the Brothers House. Thereafter when an unusual sound was heard at night, especially if it had any resemblance to the tap-tap-tapping of a shoemaker's hammer, some one of the Brothers would

whisper: "There's Kremser!" Now and then light steps could be heard hurrying through the halls. And then occasionally one of the men would catch a glimpse of a little man in red as he slipped past a door in the passageways connecting the individual rooms of the Brothers.

Passing years brought changes and the elimination of the need for the old Brothers House system and the time came when the building was no longer used as a home for the unmarried men of the community. The Single Brothers Diaconie (the business corporation) was dissolved and the single men moved out of their traditional home. For a time the building was used as a home for families, and after a few years it was turned over to the widows of the congregation and became a place for these older ladies to reside in inexpensive tiny apartments, and—as one historian put it—"gossip in comfort among the friends of their youth."

From this period came another round of stories about the Little Red Man. One instance is that of Little Betsy, who was visiting her grandmother in the Widows House. The child had a serious illness when she was very young. It came soon after she had learned to talk and it left her entirely deaf. One record says: "She was tenderly cared for, knew nothing of accidents, death or ghosts, but one day she came to her grandmother in some excitement, pointing to the hall of the House and saying, in her childish speech: 'Betsy saw little man out there, and he did this to her,' whereupon she beckoned with her finger as one child calls another to play."

A child's imagination, or the Little Red Man?

With the passing years there were other Little Red Man stories, told mostly by the elderly ladies living in the House. These were received with a half smile and some indulgence—until one day a substantial citizen of Salem was showing a

visitor through the interesting deep cellar of the one-time Brothers House. He was entertaining his guest with the story of the Little Red Man. And suddenly there he was! They both saw him.

The two men made hurried plans to catch the creature there in the gloomy chamber and quickly moved in to corner him. Their outstretched arms met around empty air and they turned to see the Little Red Man grinning at them from the doorway. The substantial citizen shared that story with many of his equally substantial friends and fellow residents of Salem.

And then the activities of the Little Red Man came to a halt. He no longer makes these appearances, according to the present residents of the old Brothers House. And it's not just because electric lights have driven him deeper into the shadows of the deep cellar. A visiting minister is credited with this termination of ghostly activity. The minister heard the story of the Little Red Man, declared that he could "lay the ghost," and then pronounced an invocation to the Trinity, to which he added the command: "Little Red Man, go to rest!"

Apparently it worked. The career of Salem's long-lived ghost finally came to an apparent halt. With respect to this end of a ghostly career, there are Moravians who—like those who were sensitive that the Little Red Man ever came into being, against their beliefs on the subject—are sensitive at the ghostly demise. They miss the companionship of the Little Red Man terribly. So in Salem you will find it an open question as to whether they should be grateful to the clergyman who exorcised the Little Red Man or whether it was a real disservice.

But memory of the Little Red Man is firmly imprinted on the Salem mind—so much so that people there still use him

when they swear an oath of fealty or courage, saying something like: "...and may the Little Red Man get me if I don't...!"

The Ghost of Maco Station



AMONG the strange phenomena of North Carolina—one that certainly deserves a place in any collection of North Carolina ghostiana—is the story of the Ghost of Maco Station. Maco is a point on the Atlantic Coast Line Railroad, fourteen miles west of Wilmington (south by timetable direction) on the Wilmington-Florence-Augusta line. It is merely a tiny point on a railroad artery, and would have remained just that except for a ghost legend that has grown up there, giving Maco dubious fame—but fame that has spread far and wide, especially among lovers of ghost stories.

The Maco Station story falls into somewhat the same category as North Carolina's famed Brown Mountain Lights. I told the Brown Mountain story in my book, *The Devil's Tramping Ground and Other North Carolina Mystery Stories*. Although both Maco Station and Brown Mountain have lights that appear and disappear mysteriously, I consider the Brown Mountain lights an unsolved mystery and the Maco Station light a ghost story.

The Maco Station ghost light goes back to 1867 and the story of Joe Baldwin. In that year a section of what is now the Atlantic Coast Line Railroad was rebuilt to include, among other things, a station called Maco. This station point had previously been known as Farmer's Turnout.

Joe Baldwin was a conductor on

one of the ancient trains drawn by wood-burning engines. It made regular runs west from Wilmington and the sea, touching Maco and other points along the line.

In that primitive era of railroading, cars were joined by pins and couplers. Joe Baldwin, riding his train one night on a rear coach, suddenly realized that it had become uncoupled. Another train was following, and Joe Baldwin's immediate fear was that this second train would plow into the free car before his distress would be noted or remedied. He therefore hurried to the rear platform of the wild coach and saw the approaching headlight of the second train. He seized a signal lantern and started waving it frantically from the coach's platform. But the fast-moving train closed in rapidly on the slow-moving coach, which had lost its motive power and

was coasting to a stop. The engineer on the approaching train, paying no heed to the frantic signals of Joe Baldwin, apparently had not yet seen what was ahead. But Joe stuck to his post and to his signaling, swinging the lantern more and more furiously. The train plunged on. Finally, with a great crash, it rocketed into the wild coach, completely demolishing it. In the terrific impact, Conductor Joe Baldwin was decapitated.

A witness at the wreck recalled that in the meeting of the engine with the free car, Joe Baldwin's lantern was waved until the last second and then was somehow hurled meteorlike away from the tracks. It fell in an adjacent swamp some distance from the wreckage, rolled to an upright position, sputtered, caught up again, and continued to sit there and burn brightly until it was picked

up and moved.

Shortly after this fatal accident, a mysterious light began to appear along the Coast Line tracks in the Maco section. It has been appearing there over the years ever since. In fact, it has become quite a fad for parties to make night excursions to Maco Station to see this weird light come swinging down the tracks, only to disappear when anyone gets close to it. The ghostly performance has afforded midnight thrills to many hundreds.

Summertime is the popular season for paying the Maco Station light a visit. Dark and moonless nights are better because they afford a clearer, sharper view of the light. Cars can be parked just off the highway near a country store and then the ghost party can walk a hundred yards or so down a lonely road toward the

railroad tracks. The cheerful and hilarious voices of such a party are likely to drop off into whispers at this stage of the expedition. It is usually a somewhat silent group that climbs stealthily up the cindered path to await the appearance of the phenomenal light.

And then the light appears.

It will show itself at intervals of fifteen minutes or so. And as the watchers stand there in the night, trying to dope the thing out, they are sure to recall the story of how Conductor Joe Baldwin, waving his lantern desperately at an approaching train, lost his head—and his life—on that very spot.

From a vantage point the light is first seen at some distance down the track, maybe a mile away. It starts with a flicker over the left rail, very much as if someone had struck a

match. Then it grows a little brighter, and begins creeping up the track toward you. As it becomes brighter it increases in momentum. Then it dashes forward with a rather incredible velocity, at the same time swinging faster from side to side.

Finally it comes to a sudden halt some seventy-five yards away, glows there like a fiery eye, and then speeds backward down the track, as if retreating from some unseen danger. It stops where it made its first appearance, hangs there ominously for a moment, like a moon in miniature, and then vanishes into nothingness.

That is the usual pattern of the appearance, although different people always report seeing the thing in a slightly different form and fashion. The light appears over and over again. Weather and the seasons seem to have no influence on its visibility.

It has been known to vanish for a month at a time, only to reappear several nights in rapid succession. It seems to be a matter of Joe's discretion.

Stories that deal with Joe Baldwin's nocturnal trips in search of his head include one that dates back to 1873. In that particular year, railroadmen say, a second light appeared, and the two lights, shining with the brightness of 25-watt electric bulbs (as estimated later), would meet one another from opposite directions.

It took an earthquake to stop Joe Baldwin's nightly jaunt, and then only temporarily. For a short time after the quake of 1886, the two lights disappeared. Soon, however, a single light reappeared, weaving silently along the tracks near Maco Station. Folks knew then that Joe Baldwin was again looking for his

head.

In 1889 the train bearing Grover Cleveland, President of the United States, paused near Maco Station, after dark, to take on wood and water. (This predated the Atlantic Coast Line, and the road was then the Wilmington, Manchester and Augusta line.)

The night was balmy, and President Cleveland alighted from his special coach to take a stroll along the tracks. While walking along, he saw a train signalman with two lanterns, one red and the other green.

"Tell me," said the President, "what is the purpose of carrying two signal lanterns?"

Before the presidential train started rolling toward Wilmington again, President Cleveland had the full story of Joe Baldwin's ghost light. He also found out that two lanterns

were used at Maco Station so that engineers would not be deceived by the ghostly weaving of the Joe Baldwin light.

B. M. Jones, of the auditing department of the Atlantic Coast Line at Wilmington, was on the scene when the presidential train stopped. He was a small, bare-foot boy at the time, but he remembered well being hoisted up so that affable President Cleveland could shake his hand. He was also well acquainted with the Joe Baldwin light.

Mr. Jones recalled that one night years ago, he was with a group of boys walking down the tracks near the station at Maco. The light, he said, appeared down the track ahead of them, weaved along toward them, and then suddenly described an arc and landed over beside the track in the swamp—just as if it had been

thrown from someone's hand. That was what had happened to Joe Baldwin's lantern on the night of the wreck.

An Atlantic Coast Line operations official, veteran of forty years of railroading, has seen the light from the cab of a locomotive. He knows of instances when trains stopped on account of it. On at least one occasion he was riding with an engineer who saw a light ahead at this point, set his brakes, and was beginning to stop when the light disappeared.

Three other Atlantic Coast Line employees reported seeing the light in recent times. J. R. Blinn, after viewing it from the south, circled and looked at it from the north. He said it definitely was not a light from a moving automobile, because the Maco light moves with a jerky up-and-down motion and stays in one

place for long intervals. As it rises and falls, it is sometimes visible for five minutes at one spot. A. B. Love saw and studied the ghost light. He said he knew the explanation lies somewhere in the realm of natural phenomena, but that he couldn't explain it.

Miss Frankie Murphy was another witness. "Sometimes," she said, "the ghost light is so bright that you can almost read by it. It rises up from the side of the tracks, comes toward you and disappears. You can see the reflection along the rails."

Many explanations of this strange phenomenon have been suggested over the years. The most plausible is that the light comes from automobile headlights, as cars pass somewhere in the vicinity and are seen either along a line of vision just across the top of the railroad track, or are

reflected in some way—by the steel rails or something else.

But several things tend to disprove this explanation and to explode the theory behind it. The light was appearing before automobiles were in use, before the paved highways in the region existed. Also, roads have been rerouted several times with no apparent effect on the light. And, some years ago, an interested group arranged to close temporarily all roads and highways in the vicinity, to see if that would stop the light. Persons were posted at all intersections and points along the roads and highways for some distance from Maco, and for more than an hour, one midnight, no automobile traffic was allowed to enter the area. But the unearthly light danced and swung and bobbed up and down the track just the same.

On one occasion a machine gun

detachment from Fort Bragg encamped briefly at Maco to solve the mystery, or at least perforate it. They did neither.

Men with scientific training have tackled the problem, people in the Maco community will tell you, but no one has ever come forward with an explanation that stands. A Washington, D. C., investigator visited Maco to explain the thing scientifically. But Joe was too fast for him. The scientist said, however, that he had seen enough to convince him that the light was no *ignis fatuus*, as he had sought to establish. Others have said that the light comes from some phosphorescent formation. But at the same time they tell you that what they know about this type of illumination does not indicate that it races up and down in a limited area. The Maco light never varies a fraction

from a given course there at the scene of the one-time railroad wreck. It always appears about three feet above the left rail, facing east—always.

The people of New Hanover and Brunswick counties are not among those who seek explanations. They dismiss unbelievers, and the entire matter, by saying that it's Joe Baldwin's light, that Joe is still swinging his eerie lantern and looking for his head. And some observers claim that

they have been close enough to the light to see the guards that are part of the lantern construction.

In recent years, heedless youngsters have adopted the dangerous habit of parking on top of and across the railroad tracks at Maco for a better view of the lights up and down the track. Unless the practice is stopped, Atlantic Coast Line officials say, Joe Baldwin is going to have some company.

The Haunted Mill of Willow Creek



FROM north Carolina's rich background of story material comes this account of a haunted mill in Henderson County. Sadie Patton of Hendersonville, a well-informed and devoted student of Western North Carolina folklore and a widely known storyteller, uncovered it while pursuing her hobby.

The story tells of an ancient gristmill, far back in the days when there were more Indians than white men in the North Carolina mountain country. In the granite expanses around Jump Off Rock in Henderson County, large, bowl-like depressions

still remain as a reminder of the rude stone mortars where the patient squaws of a near-by Indian tribe performed their endless task of grinding corn for many years before the white man built his first gristmill in the region.

The Indians were amazed when the white settlers, moving into the mountain wilds, brought with them easier and speedier ways of grinding corn. The water wheel on a tumbling stream was a wonder indeed, as it turned heavy stones to grind, in a few hours, sufficient meal to feed an entire town.

Such a mill, known as the Jones Mill, was established on the old Willow Trail—or Indian Trail—a trading path of the Cherokees near Jump Off Rock and the grinding hollows worn in the granite. What the Indians thought of this invasion of their

mountain home and the presence of the white man's water wheel near their ancient trading path has not been recorded. The mill seems to have served its purpose for a time. Then it was abandoned and fell into such decay that eventually even its location was difficult to find.

Jack Huston certainly found this to be true. He had already spent three weeks searching along the headwaters of Willow Creek for the site of the old Jones Mill. He was surveying a large tract of land and needed to locate the mill's original corners and markers. Many of the early state grants of land in Western North Carolina, particularly in the area west of the Blue Ridge, referred to old landmarks long since completely erased and to Indian trails that soon either ceased to exist or were shifted in place and direction. So Jack Huston

was having a pretty difficult time with his surveying job. Nearly all the old settlers of the region were gone. Most of the line trees had been cut.

It was spring and the sun was warm, but strips of snow lingered in the coves and along north banks. Robins were hopping about, and down on the creek bank a cardinal flashed in and out among the trees in streaks of brilliance. The surveying party halted for a rest in the damp lowlands along Willow Creek. They had not been able to find a trace of rotting timbers, a crumbling water wheel, or even a sign of where a mill-race had carried water along at man's bidding. Any and all evidence of the old gristmill seemed to have vanished completely.

Now venerable Henry Hampton was a member of the surveying party, and Henry had a vast and

almost uncanny knowledge of land markings. That was why surveyors so often used his services. He had spent all his life in the community and was said to know every foot of ground for miles around. Henry had shown the surveyors traces of the Indian path along the French Broad River, had told where it crossed Echo Mountain, passed Indian Cave, and came by Jump Off Rock where the hollowed-out grinding places still showed. On the spur of land that lay between Crab Tree Creek and Willow Creek, he had pointed out places where Bob Black's boys, while plowing, had turned up Indian pipes, arrowheads, and broken pieces of earthen pots. At Bowman's Bluff there was no lack of evidence that Cherokee hunters had roamed old trails there. But when it came to locating the place of the old mill on

the Jones land, Henry Hampton had offered no suggestions while the search for markings went on and on.

The crew stood around in a huddle; nobody had anything to say; Huston had about decided he would have to give up the hunt.

Then Henry picked up a shovel and strode over to what appeared to be an old ditch. Pushing aside drooping branches of dog hobble, he began throwing out wet black dirt, until the watchers saw that he had struck a solid object. He turned to the surveyor and made this startling announcement:

"There's your old mill site on the Indian Trail."

It didn't take long, after he pointed out the post he had uncovered, for the men to check their notes and find that the distance they had followed ran out exactly at that place. The long

survey was ended.

All that afternoon, while Huston worked over his papers and made preparations for leaving the valley next morning, he kept thinking about Henry Hampton and wondering why the old man had waited so long to point out the corner, when it was apparent that he had known its exact location all the time.

Henry came broguing in about dark and watched the surveyor finish his packing. As he watched he spoke:

"Maybe you've been wondering why I didn't show you that corner sooner," he said. "But things have happened about that place that men just don't talk about. Now that you're leaving, I'll tell you why I'll never forget that old mill." And this statement, made with some difficulty, opened the floodgates for Henry's story. He said that folks in that area

had regarded the old mill site up there alongside the Indian path as a haunted mill. Then he told his own experience.

As a young man he was courting a girl on Crab Tree Creek and was about to marry her. One night he was walking, in bright moonlight, along the Jones road at the Gap. From that point he could see down into the Willow Creek valley and he started thinking about the mill site on Willow Creek. A mill was still standing there, then, although it had been abandoned.

He thought the mill might fit into his plans to marry the girl over on Crab Tree Creek. He told himself it would be a good chance for a young man to go there and reopen the mill. He could tend farm and then run the mill in slack seasons, grinding for his neighbors. There was no other mill

near by.

By the time he came to the forks of the road he was so interested in the plan and its possibilities that he decided to go and look the place over—even if it was well past midnight. The full moon was high in the sky and it seemed almost as light as day. He knew well enough the story of how Robert Jones had come there after the Revolutionary War. Jones had grants for two or three thousand acres of land—some of it having been given to him for service in the army. And he bought up more land, too. It could be had then at a few cents an acre. The Cherokees had a trading path through the area and Jones's papers called for the Willow Trail as a boundary line—the same line that Jack Huston had so much trouble locating. Well, Jones settled down, put a log dam on Willow Creek, and built

his first mill there. The mill was located near the hollowed-out places in stone, where the Indian women had been pounding their corn for years and years.

Jones quickly progressed from a quern to a corncracker type of mill, or pound mill. Jones was smart. He devised a way of putting corn in a hopper at night and leaving the ponderous water wheel going at a slow splish-splash all night long, to find his meal ground and ready in the morning. And he was a hard worker. His farm was soon cleared, stables were built, and he put an "L" on his log cabin—a mark of affluence indeed. By that time Jones had decided to build a real gristmill, so that he could take on the grinding of grain for the entire neighborhood, if they wanted it. There was no millwright around in those days; so he went to

Charleston, where his first wife's people kept a store, and had them order millrocks to be sent over from England.

Back home, and waiting for delivery of the stones, he built the millrace and water wheel. Finally a ship brought the stones to Charleston and his brother-in-law hauled them by covered wagon to what is now Henderson County. They were put in place and the first gristmill to do custom grinding in that entire valley started operation.

Some months after the mill opened Jones worked late and was slow in coming home to supper. When dark was closing in, Mrs. Jones sent one of the older children to see what was keeping his father. The boy soon came rushing back to report that his father was lying on his face on the ground near the mill. When

the neighbors got there they found him with an arrow buried to the haft between his shoulders. Some of the roving Indians had been giving trouble, and all evidence was that one of them had shot Jones from ambush as he sat on the hitching block.

After that, through the years that followed, all sorts of tales were told about the Jones Mill there on Willow Creek. Sounds of the mill grinding away in the middle of the night were reported. White shadowy figures were seen there. It finally got so that no one would go there, and after a year or so the Jones widow moved away. When the Jones boys were grown they came back and made plans to live there. But by that time the mill and water wheel were falling apart. In dividing the land between the sons the leaky old millrace was agreed on as a boundary line. One

corner was fixed where the old hopper base used to be.

Ralph Jones built a house on the upland side of his tract. People in the section were beginning now to raise wheat; so Ralph put up another mill, one equipped to make flour as well as meal. Folks around the settlement were glad to have this new or rebuilt mill, and it "ran busy" for three or four years. Ralph and his wife had no children and lived alone. One night some boys out possum hunting saw a big fire against the sky. When they reached it, they found the Ralph Jones home settling down into ashes. After the embers cooled they found enough to know that Ralph and his wife had been burned to death.

Henry Hampton said he had heard all these stories as a boy, and he recalled them on the night when he went down into the Willow Creek

valley to look over the closed mill. The door to the mill was not fastened. The moon was bright enough for him to see everything; so he went on in. The hopper had some grain in it. There was meal in the bin—he stuck his hand in and felt it. Flour was still white on the bolting cloth. The toddick was sitting right where it had been put down the last time toll was measured out. It was hard to believe that a miller had not been working there the day before.

Henry said he was pretty well satisfied that this location and his new plan were just the thing for him and his bride. They could build a little shack, move there, and run the place. Henry said he felt almost as if he already owned the mill as he pulled the door shut and started for home.

He turned back for one more look after he got out in the open. As he did

so, he saw an old lady coming out of the trail that led up to the head of the old mill race, the very place where the surveying party had been that afternoon. She was wrapped in a shawl. Henry said he thought it was some woman from the neighborhood who had been out sitting with a sick person. As he went ahead toward home the woman followed at a distance. But soon he said he realized that he heard no footsteps! Looking back he saw that the shadowy figure was following along—keeping just about the same distance away.

Henry quickened his pace after that, and finally, when he came to the point where his father's sled road made a sharp turn downhill, he was going at a good dog-trot. Then he realized that the person following him was keeping well apace and was also turning in on their roadway. Henry

started running then at full speed, with a chilling fear driving his feet faster and faster.

He didn't stop until he was in the house and the bar on the door had dropped into place. Then he tiptoed over and looked out the window. A figure stood there in the shadow of the trees down by the gate. Whatever it was and whoever it was had arms folded across the breast. Closer study from behind the window convinced Henry that it was not a woman in a shawl as he had thought, but a man—a man wrapped in what looked like a blanket.

Well, Henry told Jack Huston, he didn't do anything about trading for the mill after that night. And the mill stood vacant and kept on going down. The road routed out deeper and deeper during rainy seasons. Bushes grew up in the millrace.

Henry concluded his recital: "I
don't suppose anybody had been in
there for forty years, until we went
today looking for the old corner at
that line that calls for the Indian path
on Willow Creek."

THE DEVIL'S TRAMP- ING GROUND

Chatham County, smilingly known for a traditional rabbit population, also has a lively unsolved mystery—a mystery of nature.

Chatham, an historic county, was settled in 1771 by planters who moved in from the Cape Fear region. Both the county and the county seat, Pittsboro, were named for the Earl of Chatham, William Pitt, champion of colonial rights in the British Parliament.

The present Chatham County courthouse was built at Pittsboro in 1882 at a time when that village was known as Chatham Court House. Cornwallis spent a night at

Chatham Court House in the course of his march to Wilmington after the Battle of Guilford Court House. David Fanning and his band of Tories once raided the town while a court-martial was in progress and captured forty-four persons as a part of Fanning's program of terrorizing that area during the Revolutionary War period. So Chatham County, rich in history, looks back over nearly two centuries of vibrant life.

Against this background we have an unsolved mystery, a curiosity of nature that has grown into a legend, has attracted thousands of visitors to the scene of the phenomenon, and has brought forth hundreds of explanations as to its origin.

We go ten miles from Siler City to a point in western Chatham County for the scene of this strange story. Here we find a cleared path, in a perfect

circle, in a grove of trees on the L. R. Down property. This path has existed as far back as the memory of man—and it has always been just as it is found today, without so much as a sprig of vegetation growing in the pathway. The spot is just off a rural highway and has no more official marking or designation than a state highway sign at Harper Cross Roads, one mile distant, pointing to the odd spot.

It's the Devil's Tramping Ground, the Chatham natives say. And the story is that the Devil goes there to walk in circles as he thinks up new means of causing trouble for humanity. There, sometime during the dark of night, the Majesty of the Underworld of Evil silently tramps around and around that bare circle—thinking, plotting, and planning against good, and in behalf of wrong.

So far as is known, no person has ever spent the night there to disprove that this is what happens and that this is what keeps grass, weeds, and other vegetation worn clean and bare from the circle called the Devil's Tramping Ground.

The cleared spot, surrounded by trees, comprises a perfect circle with a forty-foot diameter. The path itself is about a foot wide and is barren of any obstruction—growing or otherwise. A certain variety of wire grass grows inside the circle in a limited fashion and residents of that neighborhood say that any attempts to transplant any of it have met with failure. Broomsedge, moss, and grasses grow on the outer edge of the circular path, but not inside the circle.

Persons who visit the spot frequently place sticks and stones in the

path and sometimes tie sticks there, anchoring them with strings across the cleared band of earth, but the path is always found clear the next day. This, the story has it, indicates that the Devil kicks the obstacles aside on his nightly perambulations.

Many have been the explanations offered for this oddity of nature—the perfect circle that year after year ever remains clear of any growth whatsoever.

One of the oldest and best-known of the legendary explanations for the Devil's Tramping Ground is that hundreds of years ago when many Indian tribes roamed the section that is now Chatham County—known then to the Indians as the Great Flats—the tribes would meet at periodic occasions in celebrations and feasts. The spot that is today known as the Devil's Tramping Ground was

a principal meeting place for these occasions of festivity, assembly, and counciling.

Thousands of these first Americans would gather and the braves would hold their vigorous war dances. The treading of their feet wore a circle in the earth as the Indians called on The Great Spirit in the Happy Hunting Ground to give them success in their enterprises of war. And their God has kept, as a token and a monument to these faithful Indian braves, the circle that their moccasined feet wore bare as they danced about their camp fire in supplication to him and in defiance of their enemies.

And there is another Indian legend about the spot, and this one ties in with the Lost Colony of Roanoke Island—as do many Tar Heel Indian legends.

Years before the first white settlers came to this region, two rival Indian tribes met in battle at the present scene of the Devil's Tramping Ground and after a short but bitter conflict stained the ground thereabouts with the blood of the dead and wounded. The leader of one of the tribes was named Chief Croatan and he was killed in the engagement. With the leader of this tribe gone and casualties severe, the remaining warriors gathered the women and children of the tribe together, and with brief but impressive ceremony buried their chief in a spot that is today the exact center of the Devil's Tramping Ground. They named the spot Croatan in honor of their fallen chief and then fled eastward to the North Carolina coast to avoid further contact with their superior enemy and to start the life of their weakened tribe

anew in another place.

This particular legend contends further that it was this spot—named Croatan after the dead Chief Croatan—that the members of the Lost Colony were headed for when they carved the word "Croatoan" on a tree and left the site of Sir Walter Raleigh's colony on Roanoke Island, to be forever swallowed up in oblivion.

And, according to this second Indian story, since Chief Croatan was buried there, The Great Spirit has kept bare the circle around the grave, down through the years, in mourning for the loss of a faithful chief and a great leader.

There are still other explanations to be had in the western Chatham countryside. Natives there will tell you that the bare and circular path was made of the hoofs of many

horses and mules as they circled to supply the power for grinding cane at a one-time molasses mill—and that the tread was so pronounced that vegetation has never returned. Other paths made at other treadmills pulled by horses have not, however, borne out this theory.

Legend further has it that no birds build their nests in trees adjacent to this spot and that wild game is never found there. Lawyer L. P. Dixon of Siler City tells of a certain possum-hunting incident. When the hunting party approached the Devil's Tramping Ground, he says, the dogs lowered their tails, gave up the warm trail they were following, and dropped in behind their masters to have the safety and protection of human beings.

Years ago travellers never dared to pass the spot after nightfall.

Perhaps the best explanation, and certainly the most scientific approach to a solution of the mystery came first from Harry Davis, curator of the North Carolina State Museum. Curator Davis was in that area on one occasion, with Dr. J. L. Stuckey, state geologist, when they were testing wells for their sodium chloride content—and sodium chloride is common salt.

While in the vicinity they encountered the remains of ancient salt licks that had been used by buffalo and deer—and buffalo and deer did roam the Chatham terrain in days long gone. In the area, Mr. Davis noted several instances of vegetation that thrives on moisture from brackish water such as is found along the coast. There is other definite evidence of a pretty heavy salt content in some parts of that section.

Mr. Davis thinks that the Devil's Tramping Ground is nothing more or less than a spot of earth that is sufficiently loaded with salt to prevent ordinary vegetation from thriving there.

And this horse-back opinion of the curator of the Raleigh Museum has been backed up by recent scientific investigations. But even these investigations did not solve the mystery.

W. A. Bridges, of the W. A. Bridges Laboratory at Wilson, and Dr. I. E. Miles, director of the Soil Testing Division of the North Carolina Department of Agriculture, ran tests on samples of soil taken from the middle of the circular path. I made arrangements for the samples of soil to be taken by W. B. Morgan, Siler City newspaper man, after a Devil's Tramping Ground radio program that I presented had produced such a

widespread interest over the state.

The tests by both chemists showed that the soil in the path of the Devil's Tramping Ground is sterile. Mr. Bridges' report said in part: "Although there may be other factors of a physical nature that would make this a sterile soil, our findings show that plant life will not be supported on a soil that is so acid and so low in the necessary soil nutriment."

But the mystery that remains in the face of that scientific finding presents the questions: With the soil in this curious spot too poor to support plant life, why the circular path with grass and trees growing right up to its edge? Soil rebuilds itself over a period of time; so why has this spot remained unfruitful as far back as we have recorded history, as far back as the Indian age and even to the time two hundred years ago when settlers

first came into this territory? So science deepens our mystery as it seeks to solve it.

Meantime, the natives of western Chatham and many of the thousands of people who go there to examine the curious spot adhere strongly to the belief that the Devil himself has reserved that spot of land for his personal use.

I heard a story from Dr. Will Long of Graham which bears out Harry Davis' contention that the explanation of the Devil's Tramping Ground lies in a salt content of the earth there. Dr. Long told me of a strange sight seen in Chatham County in his youth. Passing a certain area there one day, he saw sheep come pouring up out of the ground in a long chain of scurrying animals—an amazing sight indeed!

Investigation revealed that the

sheep were down in an old salt lick of the sort that Mr. Davis said was used in other ages by buffalo and deer, back when the Indians knew the area as the Great Flats. Animals—wild and domestic—that had roamed those hillsides for years had licked at the salt deposit and eaten it away until a great cave had been carved out in the earth. The sheep of Dr. Long's story, like many an animal before them, had gone into the opening for a few licks at the salty formation there.

There are two man-made scars at the Devil's Tramping Ground. They are holes in the center of the Tramping Ground and they were made there by unknown vandals and treasure seekers who dug there as a result of still another legend that has grown up about the place—indicating that there is a buried treasure under the eerie spot. There is no

available explanation as to the source of this theory about hidden wealth.

Just who first discovered the spot is not known. There is evidence that the story of the Devil and his nightly meditative walks have been handed along for more than 150 years, from one generation of residents in that section to another.

There is no evidence that the Devil—if he still goes tramp-tramping

there in a circle in the dark of night—has ever resented the curiosity that has brought thousands to his tramping ground for a possible invasion of his privacy. But if he takes his nightly walks in Chatham, and if he thinks as he tramps, and if this thinking is as evil as one would suppose, then many of the world's woes have been generated in lovely, rural Chatham County.

THE BROWN MOUNTAIN LIGHTS

In the majestic mountain country of Western North Carolina is the highest peak east of the Rockies. This well-known formation is Mount Mitchell in Yancey County. Western North Carolina also boasts of Clingman's Dome, Grandfather Mountain, Chimney Rock, Linville Gorge, Blowing Rock, Table Rock, and others. They are all widely publicized and well-known peaks, mountains, and formations.

But perhaps the most famous of all the Western North Carolina hills is up in Burke County, not far from Morganton. It is not a very high mountain; there is nothing remarkable about its formation; there are

no sensational lines, peaks, or cliffs. It has, in fact, a rather commonplace name, in contrast to some of the more picturesque designations that have been given to certain points in the Land of the Sky.

This mountain is known as Brown Mountain. It isn't, in truth, much of a mountain as mountains go. It lies somewhat in the foothills of the Blue Ridge and is only 2,600 feet in elevation. But its fame lies in certain mysterious lights that have long hovered over it during the night.

These lights, known for many years as the Brown Mountain Lights, not only have attracted the attention of the people of this state but have aroused the curiosity of a nation as well. In fact, this interest has been of such extent that two separate and formal investigations have been conducted by the United States Geologi-

cal Survey.

The lights are extremely faithful and make their appearance with remarkable regularity—when the weather is such that the presence of the lights can be checked on. Sometimes they can be seen and sometimes they can't. But usually, in fair weather, not too much patience is required for a look at the bobbing lights.

Persons who wish to see the lights can take up their position at Wiseman's View on Highway No. 105 near Morganton, about eight o'clock in the evening and look to the southeast. The Linville-Grandfather Mountain area is also a vantage point. Suddenly there will appear a light about the size of a toy balloon. It is very red in color, and it will rise over the summit of the mountain, hover there momentarily, and then disappear.

In a few minutes, the light will appear again, but at another point on the mountain. And so, through the night, the lights appear, disappear, and then reappear, at different points around the mountain, but nowhere else.

As is the usual thing in such cases, the observers have never been quite able to agree on just what they see. To one observer the light is pale—almost white, is restricted to a definite circle, reappears several times in rapid succession, and then fades out for twenty minutes, only to reappear in the same circle.

Another formal report, made by an observer several miles away from the first observer quoted, saw the light soon after sunset. It was a glowing ball of fire, he said, yellowish in color. It persisted for half a minute and then disappeared. To this man

the light appeared as a bursting sky-rocket, only much brighter.

To some the light seems stationary and to others it moves about in different directions.

A minister once wrote that the lights appear to him as an incandescent ball of fire. The theories advanced to account for the lights are many, varied, and sometimes as fantastic as the lights themselves. The superstitious see in them manifestations of the supernatural. Students of the earth and its formation have tried to explain the mystery through deposits of mineral ores. Boyish pranks have been considered—although it would have been a pretty long-drawn-out prank, or succession of pranks by succeeding pranksters.

But the lights have been so alluring that scientific minds have devoted hundreds of hours of study to the

matter. Interested persons have spent months of time in contemplation. And reams of paper have been consumed in stories written and theories advanced. A great number of strange and uncanny stories have sprung from the existence of the lights. Everybody who has seen them apparently has some theory about the Brown Mountain Lights.

Of course, it has been suggested that the strange light is a will-o'-the-wisp, but this theory does not hold because there are no bogs or marshes in the vicinity. Others suggest phosphorus, but that element oxidizes rapidly and is never found in the free state. Still others say that it is fox fire, but the light is too pale and feeble for this classification. It has been suggested that beds of pitchblende ore, from which radium is derived, are present in the vicinity. But even

if this were true, there would be no light because the rays from radium are invisible. And, supposing radium rays were visible, they would give off a constant glow and not the intermittent and spasmodic gleam of the Brown Mountain Lights. However, the geologists have settled once and for all the matter of a possible geological explanation of the puzzle by announcing that Brown Mountain is composed of ordinary Cranberry granite, with no strange, weird, or interesting additions to that base.

Hydrogen sulphide and lead oxide were reported in the vicinity, and the lights have been attributed to this. Then there is the theory that moonshiners operate on the mountains, firing their stills on the distant hillsides at night. And, of course, it is quite likely that contraband has been made on those very hillsides. But this

still doesn't explain the intermittent character of the lights as seen from vantage points at some distance away from the mountain.

St. Elmo's fire has been brought forward in explanation. This is an electrical discharge which accompanies a thunderstorm under certain atmospheric conditions, especially at sea. But since the lights appear when there is no storm and when the skies are clear, this theory, like many others, has had to be discarded.

Someone tried to apply the theory of the Andes Lights. This is a phenomenon of the high Andes, where silent discharges of electricity pass through the clouds to the mountain peaks. This discharge produces a light with a circular border that is visible at great distances. But the Andes Lights—so called—appear only at very high altitudes, some

15,000 feet or more. Brown Mountain is much too low in elevation for the Andes Light phenomenon to occur there.

Then the desert mirage theory was advanced. There was some reasoning that air currents of different densities and inequalities in temperature might produce reflecting surfaces from which the brighter stars could be reflected.

Carl A. Witherspoon, Jr., is one who sticks to the mirage explanation. He said of the Brown Mountain Lights that it is "not one of those things you *think* you see, but an actual transmission of light through heat layers acting as lens and prisms and projected on some barrier or mist or dust particles. . . ."

William V. Dodge belongs to this same general school. He wrote that his grandmother, Emma J. Dodge,

had a summer cottage at Linville Falls and that he had visited there often. "During practically every one of my visits there," he writes, "I made it a point to see the 'lights,' usually from Jonas Ridge, or Bald Ground, both of which are marvelous vantage points, and I have formed a conclusion. It is best explained by the seeming 'pool' of heat that every motorist has seen on a paved highway somewhere in front of him, which 'pool' reflects oncoming cars, etc. Now, it is my theory that every night, when the cool air comes down the valley from the higher mountains to the northwest, this cool air forces the warm valley air to rise, and as Brown Mountain is a long, low, flat ridge, it will move slowly over this ridge, reflecting stars, or any other light, by a distortion of the atmosphere.

"Most people will grant that it is a

distortion of the atmosphere, but I think most of them try to visualize a light reflected from somewhere on the ground, but they strike a dead-end when they try to explain that the 'lights' were just as bright as ever after the great flood of 1916, when no lights were to be had on the ground. I can't ever recall having seen the Brown Mountain Lights when the sky was overcast, thus strengthening my conviction that the 'lights' are reflections of stars, caused by a distortion of the atmosphere which is in turn caused by warm valley air being forced over Brown Mountain by cold mountain air."

Dr. J. H. Brendell, a Methodist minister, first heard about the Brown Mountain Lights from his grandfather, who had said that the light rose up from the mountain something like a moon to remain

suspended there in the air for a time and then fade out. When he was a veteran minister, Dr. Brendell was sent to the Table Rock charge of the Methodist Church near the heart of the Brown Mountain Lights country. His interest in the story his grandfather used to tell him was revived, and Dr. Brendell talked to many old and young people about the lights. From them he got the impression that the natives regarded newspaper accounts and attempted scientific explanations to be generally erroneous. No explanation was satisfactory to these people.

"Late one dark and sultry August night," Dr. Brendell wrote, "I came home with my family to the parsonage. We had been to a revival service. As we got out of the car, one of my sons looked toward the West in the direction of Brown Mountain and

exclaimed, 'Look! There is the Brown Mountain Light.'

"We looked, and there was the light several feet above the mountain top. It looked to be larger than any star, was coneshaped, and appeared to be something on fire. While we were looking, another one, not so large, came up from the eastern side and soon flickered out. Another came up from the western side and did the same way. We looked through a field glass, and found that it looked even more like a ball of flame. It slowly rose higher, growing smaller all the while, until it finally went out. . . ."

Dr. Brendell was seeing with his own eyes the thing that his grandfather had told him as a boy—how a light would rise from the mountain, suspend in air, and then fade out.

A physicist who went to the scene quickly hit on the theory that what

was seen from Rattlesnake Knot was locomotive headlights. But a headlight on a locomotive or an automobile would cast a beam of light, like a searchlight, and not a ball of light as this appeared to be.

Those hardest to satisfy with an explanation of the Brown Mountain Lights are the people who live in the vicinity and have grown up near the lights and in year-to-year association with them.

Early in 1947, J. L. Hartley, a veteran State Fire Warden from that mountain area, reduced to writing his theory that the lights are there by divine power. He said: "If God could make Brown Mountain, could he not also make the lights?" He added:

"I have lived for sixty years in sight of Brown Mountain. From 1914 to 1922 I supplied the State Hospital at Morganton with beef cattle. This

caused me to travel the old Jonas Ridge to Morganton at all times of the night. This road leads about two miles south of the base of Brown Mountain, and I have seen the lights looking north from this road.

"At that time for a distance of twenty miles looking north, this was a part of the Pisgah National Forest and a vast wilderness. No automobiles could travel there, and no voices were heard there save those of God and the Black bear.

"On Linville Mountain you have between you and Brown Mountain, looking north, Ginger Cake, Short Off, and Table Rock Mountains. This chain is much higher than the Wiseman's View outlook. Therefore it excludes any view of Brown Mountain. I have served as a State Fire Warden for thirty years and have fought forest fires on every mountain from Linville

Falls to Blowing Rock at all times of the night, and have seen these lights a great many times from Grandfather Mountain above any human habitation. It is true there were hunters with lanterns, but please tell me whoever saw a lantern ascend up into the elements where no game exists. . . ."

This "divine power" explanation is typical of the feeling that residents of the mountain country have toward the phenomenon, oddity, reflection, illusion, or what-have-you.

Brown Mountain natives argue energetically that the scientists are all wrong. They like to recount the tale of a woman of that region who disappeared about 1850. There was a general suspicion in the area that the woman's husband had murdered her. Almost everyone in the community turned out to help search the moun-

tainside for her body. One dark night while the search was on, strange lights appeared over Brown Mountain. These were not like any light that anyone in the searching party had ever seen before. Some were scared and contended that the lights, bobbing away there, were in fact the spirit of the dead woman come back to haunt her murderer—and maybe to keep people from searching for her body.

The search ended without even a trace of the woman—unless possibly some blood stains found on a stile could be traced to her. The husband explained these stains by saying they came from a pig he had butchered a few days before and which he had carried across the fence by way of this stile.

A little while after that, a man who was relatively a newcomer to the

neighborhood left the community with a fine horse and wagon that had belonged to the missing woman's husband. The husband said that the man had bought them, but everyone knew that the newcomer had shown no evidence of having money. He was never heard from again, but people assumed that he had either helped with the murder or had known of it and had been bribed to leave.

But the body was eventually found. Long years afterwards, a pile of human bones was found under a cliff. These were identified as the skeleton of the missing woman. This legend accounts for the first time that the Brown Mountain Lights are said to have appeared. They have been seen at intervals in all the years since—down to this day.

In 1922 a Federal Government geologist was assigned to make a sur-

vey and study of the Brown Mountain Lights phenomenon. He arrived in Burke County with a complete layout of scientific equipment for the job at hand. He had topographic maps, a plane table, telescopic equipment, a barometer, compasses, flashlights, camera, field glasses, and so on.

This man observed conditions and made a careful study extending over several weeks. With his maps spread out and his equipment mounted in place, he sighted landmarks, plotted lines, and worked with angles. In his final report, after making this careful survey, he said the Brown Mountain Lights came from a wide variety of things. He reported that 47 per cent of the lights were caused by automobile headlights, 33 per cent by locomotive headlights, 10 per cent came from fixed lights, and 10 per

cent from brush fires.

It was this man's contention that, although the lights seem to hover over Brown Mountain, actually they originate beyond. Highway and rail traffic, homes or other fixed objects, some of them in the broad valley beyond the mountain, together with an occasional brush fire, supply the mysterious dancing lights over Brown Mountain.

These conclusions, complete with certain scientific data to back up each of them, were viewed with some disdain by older residents of the community. These residents said that the Brown Mountain Lights were visible before there was any railroad through Burke County or in that section of North Carolina. They were also visible before even the invention of the automobile, much less its use on non-existent highways in the

mountains.

And then it was also pointed out that the lights had never been known to appear after a long dry spell. That blasted the brush fire part of the theory.

One native stood with his back to both the highway and the railroad, and in that position still witnessed the mysterious lights as they appeared above the mountain crest. To this he added a final convincing proof, which tends to render completely negative these findings. In 1916 during the great flood in Western North Carolina, trains and

automobiles did not operate in that area for a week or more, but during that time the Brown Mountain Lights appeared as usual. Apparently some other solution must be sought.

And while an explanation satisfactory to all is a very will-o'-the-wisp itself, people still go there to look from Wiseman's View across to Brown Mountain. And when the conditions—whatever they may be—are just right, they see the dancing, flickering, mysterious Brown Mountain Lights that have baffled those who have seen them for many years.

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| TEACHER NAME | | Lesson # |
| Ethan Montgomery | | 4 |
| MODEL | CONTENT AREA | GRADE LEVEL |
| Bruner's Structure of the Discipline | ELA/Social Studies/Science | 4th |
| CONCEPTUAL LENS | | LESSON TOPIC |
| Belief | | Parapsychology |
| LEARNING OBJECTIVES (from State/Local Curriculum) | | |
| <p style="text-align: center;">ELA</p> <ul style="list-style-type: none"> RI.5.2-Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text. RI.5.3-Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text. RI.5.9-Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably. <p style="text-align: center;">Social Studies</p> <ul style="list-style-type: none"> 4.H.1.3-Explain how people, events and developments brought about changes to communities in various regions of N.C. 4.H.2.1-Explain why important buildings, statues, monuments, and place names are associated with the state's history. <p style="text-align: center;">Science</p> <ul style="list-style-type: none"> 4th Grade - Science as Inquiry: Science as Inquiry As students progress through the grade levels, their strategies for finding solutions to questions improve as they gain experience conducting simple investigations and working in small groups. They are capable of asking questions and make predictions that can be tested. Students must be encouraged to make more careful observations and measure things with increasing accuracy. During investigations, students must have opportunities to use more advanced tools such as calculators, computers, graduated cylinders, scales and meter sticks to gather data and extend their senses. They must keep accurate records and run enough trials to be confident of their results to test a prediction. They must have experiences that allow them to recognize patterns in data and use data to create reasonable explanations of results of an experiment or investigation. They should be encouraged to employ more sophisticated language, drawings, models, charts and graphs to communicate results and explanations. Students must always use appropriate safety procedures, including listening skills, when conducting simple investigations. | | |
| THE ESSENTIAL UNDERSTANDING <i>(What is the overarching idea students will understand as a result of this lesson?)</i> | | THE ESSENTIAL QUESTION <i>(What question will be asked to lead students to "uncover" the Essential Understanding)</i> |
| <i>Beliefs shape truth</i> | | <i>How do beliefs shape truth?</i> |
| CONTENT KNOWLEDGE <i>(What factual information will students learn in this lesson?)</i> | | PROCESS SKILLS <i>(What will students be able to do as a result of this lesson?)</i> |
| <ul style="list-style-type: none"> Psychology is the scientific study of the human mind and its functions, especially those affecting behavior in a given context. Parapsychology is the study of mental phenomena which are excluded from or inexplicable by orthodox scientific psychology (such as hypnosis, telepathy, etc.). A bias is a prejudice in favor of or against one thing, person, or group compared with another, usually in a way considered to be unfair. Skepticism is an attitude of doubt or a disposition to incredulity(disbelief) either in general or toward a particular object A hypothesis is an assumption or guess made for the sake of argument. Stigma means a mark of shame or discredit. The beliefs of one person or group can influence the beliefs of others. A truth is a fact or belief that is accepted as true. Truth can be a relative concept, taking on different forms for different people or groups. | | <p>Students will be able to:</p> <ul style="list-style-type: none"> Analyze Generalize Summarize Experiment Discuss Deduce Defend Simplify Justify Criticize Familiarize Identify patterns |

GUIDING QUESTIONS

What questions will be asked to support instruction?

Include both "lesson plan level" questions as well as questions designed to guide students to the essential understanding

| Pre-Lesson Questions: | During Lesson Questions: | Post Lesson Questions: |
|---|--|--|
| <ol style="list-style-type: none"> 1. What kinds of people examine reports of ghosts and other paranormal phenomenon? 2. What might a ghostbuster or a paranormal investigator do? 3. What tools might they use? 4. What beliefs do you think that a paranormal investigator possesses? 5. What characteristics should paranormal investigators possess? 6. What kinds of information would paranormal investigators gather? 7. What are some of the methods that they would use to gather this information? 8. What kinds of goals might they have? 9. What kinds of things might a paranormal investigator need to worry about? 10. What might truth mean to a paranormal investigator? | <ol style="list-style-type: none"> 1. What else might we add to our list of what we know about paranormal investigators now? 2. How did the beliefs of outsiders affect the history of the Rhine Research Center? 3. What is the difference between psychology and parapsychology? 4. What is the relationship between stigma and bias? 5. How might a stigma or bias influence a person's beliefs? 6. What is the difference between a belief and a hypothesis? 7. How might paranormal investigators note success or failure in their work? 8. What kinds of tools will we need to form a hypothesis about a potentially paranormal phenomenon? 9. After reading the description of this experiment, what do you believe that the outcome will be? 10. Why do you believe that? 11. What do you believe is happening here? 12. What does it mean? 13. Why do you think that? 14. What does it prove? 15. Why do you believe that? | <ol style="list-style-type: none"> 1. How can we use our combined observations to make a generalization about belief? 2. What is a generalization that your group can make about belief? 3. What did you learn about being a paranormal investigator/parapsychologist? 4. How did your individual beliefs or biases affect the conclusions of your group or vice versa? 5. How have the conclusions of the other groups impacted your own beliefs? 6. Why did your beliefs regarding these phenomena change or remain the same throughout this lesson? 7. Why do beliefs matter? 8. Why does the truth matter? 9. What can we add to our answers regarding what the word "truth" means to a paranormal investigator? 10. What is the relationship between beliefs and truths? 11. How do beliefs shape truth? |

DIFFERENTIATION

(Describe how the planned learning experience has been modified to meet the needs of gifted learners. Note: Modifications may be in one or more of the areas below. Only provide details for the area(s) that have been differentiated for this lesson.

| Content | Process | Product | Learning Environment |
|---|---|---------|----------------------|
| Sophisticated reading is included as a part of this lesson. | Students learn the language, process and thinking patterns that apply to the discipline of parapsychology | | |

PLANNED LEARNING EXPERIENCES

(What will the teacher input? What will the students be asked to do? For clarity, please provide detailed instructions)

Engage and Connect - *This phase focuses on piquing students' interest and help them access prior knowledge. This is the introduction to the lesson that motivates or hooks the students.*

1. As students enter the classroom the following question is written on the board:
 - a. What kinds of people examine reports of ghosts and other paranormal phenomenon?
2. Allow students to share their answers and the teacher or assistant should record them on the board.
3. Show students a brief clip from the "Ghostbusters" movie (fast forward to 0:15 seconds to avoid smoking scene):
https://www.youtube.com/watch?v=7_pR6mUYtOo
4. Students are given 5 minutes to independently record a list of what they know about ghostbusters or paranormal investigators. Their lists should include the following:
 - a. What might a ghostbuster or a paranormal investigator do?
 - b. What tools might they use?
 - c. What beliefs do you think that a paranormal investigator possesses?
 - d. What characteristics should paranormal investigators possess?
5. The class is asked to share their answers as the teacher or assistant lists them on the board. Students should be prepared to defend or elaborate on the items that they mention or agree with.

6. Teacher asks the remaining pre-lesson questions of the whole class:
 - a. What kinds of information would paranormal investigators gather?
 - b. What are some of the methods that they would use to gather this information?
 - c. What kinds of goals might they have?
 - d. What kinds of things might a paranormal investigator need to worry about?
 - e. What might truth mean to a paranormal investigator?

Explore - In this phase, the students have experiences with the concepts and ideas of the lesson. Students are encouraged to work together without direct instruction from the teacher. The teacher acts as a facilitator. Students observe, question, and investigate the concepts to develop fundamental awareness of the nature of the materials and ideas.

11. The teacher introduces the following articles. Students are placed in groups of 4. Two students in each group read one article while two read the other..
 - a. <https://www.atlasobscura.com/articles/how-one-man-used-a-deck-of-cards-to-make-parapsychology-a-science> or <https://indyweek.com/culture/etc/durham-s-rhine-research-center-one-country-s-last-parapsychological-institutes-seeks-quantify-ethereal/> *(remove or white-out part about Kline losing his religious faith in the second article)
 - b. When they finish, the two pairs meet to summarize the article that they just read and discuss any changes to their answers from the pre-lesson questions. Each pair then shares their findings with the other pair in their group. They then discuss, examine and elaborate upon their findings as a group of 4.
 - c. Bring the whole class back together and ask students the following question (teacher or assistant records answers on the board).
 - i. What else might we add to our list of what we know about paranormal investigators now?
 - d. The teacher then asks the following during lesson questions:
 - i. How did the beliefs of outsiders affect the history of the Rhine Research Center?
 - ii. What is the difference between psychology and parapsychology?
 - iii. What is the relationship between stigma and bias?
 - iv. How might a stigma or bias influence a person's beliefs?
 - v. What is the difference between a belief and a hypothesis?
 - vi. How might paranormal investigators note success or failure in their work?
 - vii. What kinds of tools will we need to form a hypothesis about a potentially paranormal phenomenon?
12. Students are put back into their groups and the teacher explains that they will be conducting some of the same experiments that a parapsychologist would at the Rhine Institute. At each station there is a brief description of how to conduct the experiment. Students should be instructed to focus on their own beliefs and the beliefs of others throughout the process.

Recording Sheets: Each student will receive 6 copies of a recording sheet, one for each station.

- a. In a small box at the top of each page are two questions that students should answer after reading the directions but before actually participating in each of the experiments.....
 - i. After reading the description of this experiment, what do you believe that the outcome will be?
 - ii. Why do you believe that?
- b. The rest of the page should be for individual notes and sketches. The following questions are posed at the top of this section...
 - i. What do you believe is happening here?
 - ii. What does it mean?
 - iii. Why do you think that?
 - iv. What does it prove?
 - v. Why do you believe that?

Students should take notes and answer these questions individually, in silence at the end of each experiment for 3 minutes. The group then comes together to share and discuss their findings.

Experiments (groups should rotate between stations as time allows):

1. Zener cards (print a class set of cards from <http://paganpath.com/images/library/zener.gif> on card stock):

- a. Each student should take a sheet of cards, cut them out and shuffle them.
- b. Students pair up and take turns playing the roles of parapsychologist and subject for each round.
 1. Round 1: Parapsychologist holds a card so that the subject cannot see which image is printed on it but they should attempt to project the image on the card into the mind of the subject. Subject should concentrate, attempting to visualize in their mind what image is on the card, before making a guess. Parapsychologist takes notes of correct/incorrect guesses. Repeat 5 times, pulling a random card from the deck each time. Students switch roles and repeat.
 2. Round 2: Repeat the above experiment but this time the parapsychologist will reward the subject with an M&M candy for each correct guess.
 3. Conduct further experiments of your own making as time allows.

2. Dice rolling (A variety of dice should be made available at this station. 2 or more of each of the following... 20 sided, 12 sided, 10 sided, 8 sided, 6 sided, 4 sided and a penny or quarter to stand in for two sided)

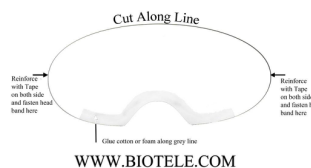
1. Students should pair up and choose the role of parapsychologist or subject (they will switch roles later).
 - a. Round 1: The subject should choose one of the dice that they feel is calling out to them (be sure that the subject is aware of the number of sides on the dice or coin). The parapsychologist will roll the die or flip the coin 5 times. The subject should make a prediction of what the outcome of the dice roll will be. As the parapsychologist rolls the dice, the subject should attempt to mentally influence the outcome of the roll to be their predicted number. Both students take notes on the outcome of each roll. Students then switch roles and repeat.
 - b. Round 2: Repeat the above experiment but this time the parapsychologist will reward the subject with an M&M candy for each correct guess.
 - c. Conduct further experiments of your own making as time allows.

3. Spoon bending- 10 or more metal spoons should be made available with extras ready to replace spoons that may be successfully bent. One computer should be made available with the following website <https://www.mind-energy.net/archives/167-spoon-bending-instructions-and-pictures.html>. A second computer should have the following video of the author conducting a successful spoon-bending session <https://www.mind-energy.net/archives/170-spoon-bending-video.html>. Students should watch the video silently, saving comments, judgements or beliefs until after each of their teammates has attempted to bend a spoon using the following instructions and then allow time for individual note taking. Save any comments that may influence the beliefs of others until the group discussion portion of this activity. Instructions for the experiment are available on the website but should also be displayed in a written format at the station as follows....

- a. Observe the available spoons on the table. Use your feelings and let them tell you which spoon will bend. (I know it sounds funny but this is what I did the first time).
- b. When you feel you have the right spoon and mind you pick one that is fairly thin to start out with.
- c. Hold the spoon vertical and look at it and ask it to bend. Or say you will bend for me. Really believe it.
- d. Start your meditation. Breathe in and breathe out. Breathe in energy from the universe and imagine it as a golden ball above your head.
- e. Breathe out negative feelings and put the recycled air into your solar plexus. (The energy)
- f. Keep doing this for about 15 breaths while massaging the spoon just below the bowl of it.
- g. Make yourself lightheaded while really concentrating on your breathing and producing energy and thinking the spoon will bend.
- h. Then at the point of when you feel you're ready with all thoughts clear except the spoon get ready
- i. Look at the spoon for about 2 seconds and think you will bend for me, while still breathing, breathe faster and hype yourself up.
- j. Look out the window or at something for about 1 second and start to bend the spoon, and say very loud BEND! BEND! BEND! (really get into it) you will notice that the spoon becomes like rubber.
- k. Your spoon will feel like rubber and it will bend for you.
- l. After you have bent the spoon around two or three times, lay it down and wait about 1 min. the spoon will harden again.

*I have noticed that the more people that are around you the collective energy will help you get there more. Make a lot of noise laugh I did this the other day and it was my fifth spoon and it felt like rubber. Have them touch the spoon before bending it. You have to believe the spoon will bend. Tell yourself you have done this a million times already. After you have a spoon bent, keep it around you and whenever you have doubt look at it and remember that you did this and you can do this again.

4. Ganzfeld Experiment: Print a class set of the following image on card stock....



Provide scissors, tape, glue sticks, a stapler, cotton balls and long rubber bands for headbands as well as a pair of thick gloves and several sets of earphones as well as a means for them to listen to white noise (<https://www.youtube.com/watch?v=wziWixXBs>) during the experiment, such as a phone, iPod, computer, etc.

Teacher should make a mask as a model for students to use based on the detailed instructions at this website <https://www.instructables.com/id/Ganzfeld-Hack-Your-Brain-the-Legal-Way/>

- a. Each student makes their own Ganzfeld mask according to the directions on the print out and based on a model mask that the teacher made.(students should put several layers of tape over any staples to avoid injury).
- b. Students should pair up and take turns as the subject wearing their masks, gloves and the earphones playing white noise.
- c. The subject should remain still for 5 minutes. The parapsychologist will act as time-keeper and take notes on their observations of the subject during this time. The subject may or may not begin to experience sensory hallucinations (visual, auditory, tactile, etc.).
- d. When the time is up the parapsychologist should alert the subject, who should then remove their masks, gloves and earphones.
- e. The subject should explain just the facts about their experience, leaving speculation about any meaning until later.
- f. Parapsychologist and subject take notes based on the subjects explanation and then reverse roles to repeat the experiment.

5. Purkinje Lights (Jan Purkinje is considered the father of modern neuroscience. He stumbled upon this self-induced hallucination technique as a child).

- a. Students take turns closing their eyes and tilting their head towards the sun or any other bright light.
- b. The subject should then wave their hand quickly in front of their eyes back and forth for an extended period of time.
- c. The subject should begin to see simple colored spots or shapes appear behind their eyelids. These shapes should become more and more intricate and detailed as time goes on.
- d. When the subject tires or after 3 minutes have passed, one of the parapsychologists should stop the subject who will then describe their visions and/or experience.
- e. Subject and parapsychologists take notes and then repeat the experiment with the next member of the group playing the role of the subject.

5. Dowsing (Students can be instructed the day before to bring in their own dowsing rods. These can be sticks or any material that can be formed into a Y shape or two L shapes. The dowser in the video uses two L shaped rods (you can make them out of wire hangers). The teacher should provide several sets as well. The teacher should provide one computer with the following website <https://www.wikihow.com/Use-Dowsing-or-Divining-Rods> and another with the following video displayed which they should watch as a group before experimenting <https://www.youtube.com/watch?v=bbwo0YCpV3E>.

- a. Each member of the group should take turns attempting dowsing.
- b. Follow the instructions in the video...Try to convince yourself to believe that this will really work before you begin. Ask your dowsing rods how they will show you what movement signifies a no and which movement might signify a yes.
- c. Hold out your dowsing rod at arms length and ask them to lead you to the nearest water source. Do not grip your rods too tightly.
- d. Walk back and forth around the room holding your rods parallel to the ground at arms length (they should not dip up or down). The rods should also be about 9 inches apart.
- e. The rods should either point towards a water source after a time or cross one another to form an x if you are at or above a source of water.
- f. Try the experiment again with a hidden item. Give your group members any small item. They should hide the item somewhere in the room and you should attempt to use dowsing rods to find the item.
- g. After both dowsing sessions team members should silently record individual notes before the next team member attempts the experiments.

Explain - Students communicate what they have learned so far and figure out what it means. This phase also provides an opportunity for teachers to directly introduce a concept, process, or skill to guide students toward a deeper understanding.

1. Students complete all stations and should then be provided with one final meeting with their 4-person group, during which they will draw conclusions about their beliefs/hypotheses and answer the following post-lesson questions:
 - a. How can we use our combined observations to make a generalization about belief?
 - b. What is a generalization that your group can make about belief?
2. Teacher then asks each group to share their findings and they should give explanations for their conclusions. Students should contribute to the discussions of other groups and ask them questions.
3. The remaining post-lesson questions are posed by the teacher. Students respond to questions and elaborate and explain answers
 - a. What did you learn about being a paranormal investigator/parapsychologist?
 - b. How did your individual beliefs or biases affect the conclusions of your group or vice versa?
 - c. How have the conclusions of the other groups impacted your own beliefs?

- d. Why did your beliefs regarding these phenomena change or remain the same throughout this lesson?
- e. Why do beliefs matter?
- f. Why does the truth matter?
- g. What can we add to our answers regarding what the word "truth" means to a paranormal investigator?
- h. What is the relationship between beliefs and truths?
- i. How do beliefs shape truth?

Elaborate —*Allow students to use their new knowledge and continue to explore its implications. At this stage students expand on the concepts they have learned, make connections to other related concepts, and apply their understandings to the world around them in new ways*

1. Students are divided into brand new groups (split up the old groups) and provided with markers and a sheet of chart paper. They are instructed to create a group poster that illustrates/explains their beliefs about our experiments, what some of our next steps as parapsychologists might be and any thoughts or conclusions about the field of parapsychology in general, as well as how parapsychology relates to other fields of study.
2. Give a brief mini-lesson on leaving constructive criticism and avoiding insults.
3. Students display their posters and the class then does a gallery walk. Students are expected to leave at least 5 comments on people's posters using post-it notes and at least 3 of them have to be positive.

Evaluate: *This phase assesses both learning and teaching and can use a wide variety of informal and formal assessment strategies.*

1. Students individually complete a 3-2-1 summary of the lesson on post-it notes. The teacher draws 2 lines on the board to separate 3 sections decreasing in size so that the first section has enough room for 3 post-it notes per student; the second section allows room for 2 per student and the third with enough room for only one post-it per student. Students should write their secret number that only they and the teacher know on each post-it note that they get.
 - a. Students are each given 3 blue post-it notes on which they should write three main points about the lesson.
 - b. They receive 2 yellow post-its on which they will list either 2 controversial ideas from the lesson or 2 things that they disagree with from the lesson.
 - c. Finally, they receive one pink post-it note on which they will record 1 question that is related to the key concept of belief.
 - d. Students should be given a chance to respond to the notes of others and defend or elaborate upon their own if they wish or as time allows.

Durham's Rhine Research Center, one of the country's last parapsychological institutes, seeks to quantify the ethereal

BY COLIN WARREN-HICKS MAY 14, 2014 7:00 A.M.



John Kruth and Sally Rhine Feather pose for a playful portrait in the Ganzfeld room at the Rhine Research Center in Durham. But their research is serious business.

The man throws open a door and swings his arms like a maître d' presenting his finest table.

He's wearing a bright purple button-down shirt and a neatly kept beard. "Step inside," he says.

Through the door is a small vault, sealed off from all outside sound, all electrical and radio signals. Cautious, I enter. As he shuts the door, my iPhone's "3G" symbol turns to an "O."

Have you ever seen a ghost? If so, the Rhine Research Center in Durham is interested. The two-story brick building off Morreene Road looks identical to the others in its office park: white awnings, mulched flower beds, squirrels, no grotesque gargoyles or loitering phantoms.

Ordinary appearance aside, it's one of the last institutes in the country dedicated to

parapsychology, a field Merriam-Webster defines as "the scientific study of events that cannot be explained by what scientists know about nature and the world."

The Rhine Center strives to harden apparitions into data to quantify the ethereal. Relying on donations, its researchers study telepathy (mind-to-mind communication), clairvoyance (physically remote perception), precognition (received knowledge of the future), psychokinesis (moving objects with the mind), and survival, a human personality existing outside of a physical form. In short, all manner of spirits, specters and spooks.

But no, they are not Ghostbusters.

The staff is sensitive to the comparison, particularly because the Rhine's founder, Dr. Joseph B. Rhine, made Zener cards famous. The cards are a guessing game that test for psychic ability and were used by Bill Murray's character in an attempt to seduce a coed in the movie's opening scene. But the Rhine's researchers maintain that speculation is their business only when hypothesizing, not when conducting experiments or drawing conclusions.

Still, one can't help but imagine Slimer floating down Geer Street in a Durm cap: *Full Steam or Motorco ... decisions, decisions.*

A day of attending research meetings and touring laboratories at the Rhine leads me to Tanous Library. The stacks contain more than 3,000 volumes of parapsychological and occult literature, from *The Tibetan Book of the Dead* to *How I Know the Dead Return*, composing one of the five largest collections of its kind in the U.S.

Around the library's conference table, a conversation ensues about the uptick of reported incidences of psychokinesis, or "PK," over the last decade. The Rhine dropped PK from its public survey in the late-'90s. "No one was saying things like, 'Yeah, I had a clock break when Uncle Joe died,'" says visiting scholar Nancy Zingrone. "We had to put it back in."

Modern incidences of PK are usually reported regarding effects on electronic gadgets the ability to turn power sources on and off or to interfere with phone reception. "My mother collected 14,000 ESP experiences and 179 PK experiences in the early '70s, about things falling or clocks stopping," says Sally Rhine Feather. "It's nearly all electronics now. One didn't hear about many

PK experiences until you got to know the person and they would say, 'Now, let me tell you what happened to me.'"



Feather is the 88-year-old daughter of the Center's founder, and her presence is commanding for more than her lineage. A small woman with a lilting voice, she is dapper and feisty. She holds a doctorate degree in experimental psychology from Duke, and she's the Rhine's foremost historian. After all, she lived it.

When Joseph B. Rhine lived in Pittsburgh, he heard Arthur Conan Doyle lecture on communicating with the dead, and parapsychology became his passion. After earning a doctorate degree in botany from the University of Chicago, Rhine came to Duke in the late-'20s with his wife and collaborator, Dr. Louisa Rhine, and began testing students for psychic abilities with Zener cards and dice. His experiments led to the creation of the Duke Parapsychology Laboratory in the East Duke Building in 1935. Feather says that Duke provided Rhine a salary and free lab space, but not direct funding, which came from grants.

That same year, a *New York Times* article made Rhine famous, reporting, "Out of several thousand test subjects he selected eight who proved to have outstanding telepathic and clairvoyant powers" and calling his experiments "the most important research of the century in his subject." Rhine's book *New Frontiers of the Mind* coined the term "extrasensory perception," propelling "ESP" to nationwide attention.



Rhine retired in 1965. John Kruth, the Center's current executive director, says Rhine was given the choice of whether to leave his lab with Duke or take it with him. He chose the latter.

Feather believes that her father didn't think the university would maintain the lab, as skepticism was rising, and he wanted his life's work to continue.

Dr. Seymour Mauskopf, professor emeritus of history at Duke, coauthored the book *The Elusive Science: Origins of Experimental Psychological Research*. "When I came to Duke in 1964, what intrigued me was that Duke was probably most famous at that point for parapsychology," says Mauskopf. "A lot of people were unhappy with that, because it was pretty much thought to be pseudo-science."

Over three decades, academic interest in Rhine's theories abated. Many universities stopped teaching parapsychology, which is tethered to a strong stigma. In the '70s there were dozens of professional parapsychology labs in the country. Now there are perhaps three, Kruth says, mentioning only one with university ties: The University of Virginia's Division of Perceptual Studies. No U.S. university offers a parapsychology degree.

"You have maybe 200 active parapsychologists working in the world," Kruth says. "They don't have millions of grad students willing to do grunt work for a small opportunity to push their way in, like in physics. Anybody that wants to go into academia will avoid this field."

Feather agrees that people in control of academic endowments shy away from parapsychology for fear of personal discredit. I witness a presentation on electronic voice phenomena (phantom voice recordings) whose presenter will remain nameless for this exact reason.

The university's affiliation and patronage were expunged and the Parapsychology Lab left East Campus in 1965. With the help of private benefactors, Rhine then started the Foundation for

Research on the Nature of Man off campus. In 1995, 100 years after Rhine's birth and 15 after his death, the Center was renamed in his honor. In 2002, it moved to its present facility, designed expressly for parapsychological research.

Feather strongly supported hiring Kruth in 2009 and promoting him to executive director in 2011. "We hadn't had a director that was good with finance since 1965," she says, adding that the Center has relied on a multimillion-dollar matching endowment from Xerox founder Chester Carlson since then, which has recently been depleted.

When asked if the Rhine was in danger, Feather said that it also relies on small donations, fees to see public speakers (a May 23 event deals with "PK, Mind-Matter and Consciousness") and membership dues. "These things had slipped down but are being built back up [by Kruth]," she says. The Rhine also offers online educational courses and two monthly public workshops, the Remote Viewing Group for clairvoyance and the Psychic Experiences Group, where people share their supernatural encounters.

During the Rhine's 70-year existence, cards and dice have given way to more sophisticated technology. In the Center's bioenergy lab, Kruth uses a photomultiplier (an electrical engineering tool) to measure the output of biophotons of people who claim to manipulate energy, or "chi," including martial artists, meditation masters and energetic healers. A scientifically taboo term in the '70s for its association with "auras," which were considered hokum, biophotons are now studied in graduate courses at MIT.

An empty room produces five to eight biophotons per second, while a sedentary individual produces 12 to 20, Kruth says. He has measured more than 120 people, 8 or 9 percent of whom produced a variance from the baseline. And a few, when asked to "do their thing," produced even more striking results.

"It will jump up to 60 photons per second three times the baseline!" Kruth says. "I've had people go to 200,000, 400,000. I even had two people go over a million." The most drastic results come from energetic healers and Kundalini yogis. "You don't need statistics to figure out that something strange is going on in here."

Kruth, who holds a master's degree in psychology from Capella University in Minneapolis, Minn., is no mad scientist, but a fervent guy whose commitment to unbiased research seems

sincere. "Ouija Boards are toys," he says. "They are not portals to the afterlife and the devil does not come through the board. It doesn't matter how much I believe or know. If I can't put it into a laboratory and demonstrate it in a scientifically viable way, it doesn't matter."

It's Kruth that leads me into the sealed vault, called a Ganzfeld room, which he says provides evidence that an altered state of consciousness helps people score higher on psychic aptitude tests. It's furnished only with a recliner where a "receiver" sits, calmed into hypnosis with all outside sensory input removed. Ping-pong balls worn over the eyes and bathed in red light simulate closed eyelids.

In a similar room down the hall, a "sender" faces a screen, watching a movie clip over and over, attempting to psychically send the image to the receiver's mind. The receiver talks in a stream of consciousness for 30 to 45 minutes. Afterwards, the receiver is shown four movie clips and asked to give each clip a score from 0 to 100, measuring its similarity to what they saw in their mind's eye.

"With four clips to choose from, a person has a 25 percent chance of getting it right. But studies have yielded results closer to 32 to 35 percent. This is a tremendously significant statistic," Kruth says. Conducted at Juilliard on music students, the test yielded accuracy as high as 75 percent. There will always be critics and skeptics of parapsychology's academic standing, but to Kruth and the Rhine, this is science.

I ask Kruth how writers do in the Ganzfeld experiment. He doesn't know. "Probably poorly," I offer. He doesn't disagree.

This article appeared in print with the headline "Paranormal activity."

Retrieved from: <https://indyweek.com/culture/etc/durham-s-rhine-research-center-one-country-s-last-parapsychological-institutes-seeks-quantify-ethereal/>

How One Man Used a Deck of Cards to Make Parapsychology a Science

Dr. Joseph Rhine believed that psychic powers could be studied—and that he had the tools to do it.

BY LINDA RODRIGUEZ MCROBBIE DECEMBER 27, 2016



Hubert Pearce and Dr. J. B. Rhine experimenting with Zener cards. [PUBLIC DOMAIN](#)

IN TERMS OF VISUAL DESIGN, the cards are simple: Five different shapes—a five-pointed star, a circle, a square, a cross, and three wavy lines—printed in black on a white background, with an abstract blue pattern on the back like you’d find on a regular deck of cards. But what the cards are designed to *do* is a bit more complicated. They’re intended to test something that half of Americans believe in and most of the scientific community says doesn’t exist at all: extrasensory perception, or ESP.

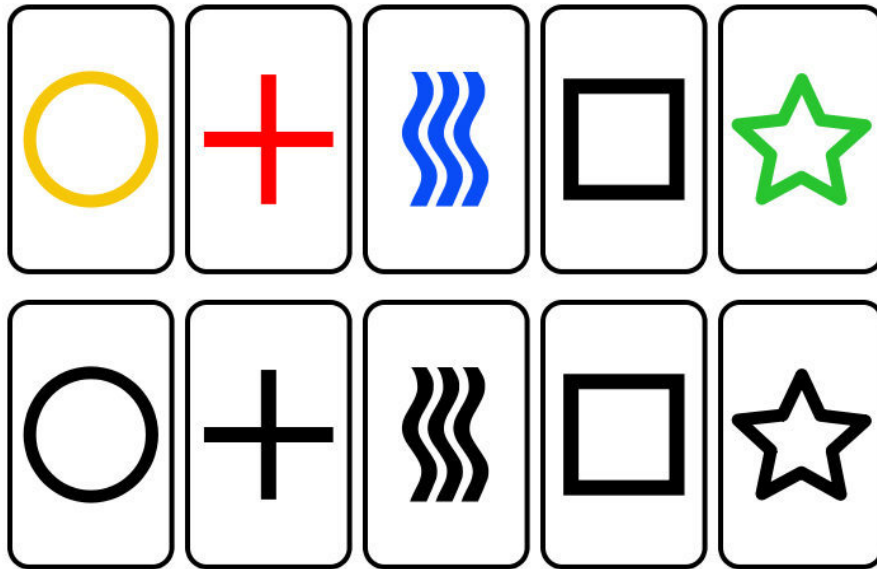
Since the 1930s, Zener cards, also known as ESP cards, have been used to quantify psychic ability, testing for telepathy and clairvoyance (you might remember them from that scene in 1984’s *Ghostbusters*, when Venkman tests the “effects of negative reinforcement on ESP”). The cards straddle the intersection of science and the paranormal, pseudoscience and legitimacy. In a lot of ways, that’s a space also occupied by the man who pioneered their use, Dr. Joseph B. Rhine, founder of the Duke Parapsychology Lab.

Rhine's interest in the paranormal took hold in 1922, when he was a young plant physiologist earning a Ph.D. in botany at the University of Chicago. Rhine and his wife Louisa were both dedicated scientists, but they had questions that simple biological reductionism didn't seem to answer; Rhine had once thought of joining the ministry, until his wife steered him towards science. And then, in May of that year, they sat in the audience to hear Sir Arthur Conan Doyle make his case for life after death.

Doyle, best known for creating hyper-rational detective Sherlock Holmes, had been an avowed Spiritualist since 1916; he believed that spirit communication via mediums could offer scientific proof of a spiritual beyond. His 1922 lecture tour of America was a kind of Spiritualist mission, spreading the good news that the veil separating the bereaved living from the beloved dead was thin and easily breached by psychic perception. This message resonated with an American public still aching from the devastation of the Great War.

“I stand but ankle deep in a vast ocean of psychic knowledge, but even if I am only ankle deep, I can perhaps bring some message to those who stand dry shod on the shores,” Doyle told an enraptured audience, according to a contemporary Associated Press report. “This mere possibility was the most exhilarating thought I had had in years,” Joseph Rhine reportedly wrote later.

It wasn't Spiritualism itself that attracted the Rhines, but rather the idea that science could examine the kinds of answers Spiritualism offered. “Both of my parents as a couple were searching for answers to the Big Questions of Life, perhaps typical of their era, when encountering scientific thinking in college disrupted the religious beliefs of their youth,” Dr. Sally Rhine Feather, the Rhines' oldest daughter and herself a clinical psychologist, told me by email. Feather described her parents as “serious young people from fairly simple farm backgrounds in the Midwest,” each of them the first in their families to pursue any advanced education. Science had replaced religion for them, but it wasn't enough. They wanted to use science to study the kinds of experiences that had, until recently, been the province of religion alone.



Five kinds of Zener cards, in different colors. [MIKHAIL RYAZANOV/CC BY-SA 3.0](#)
After graduating in 1925, Rhine took a job teaching botany at West Virginia University, but his true passion remained with these big questions. He and Louisa soon “began extracurricular study of psychical research material,” Feather said. In 1926, the opportunity arose to study under Dr. William McDougall, a psychologist interested in what was then called “psychical research,” during his sabbatical from Harvard University. Rhine and Louisa leapt at it: They resigned their teaching positions, sold all of their furniture, and moved to Boston.

“They decided to just abandon careers in plant physiology to see if they could find scientific evidence for the afterlife,” said Feather. One of the first places they looked was in the dark, stuffy parlor room of Mina Crandon, a prominent medium who often performed séances clad in only a dressing gown and stockings. The Rhines found her performance risible. As Stacy Horn recounted in her fascinating book, *Unbelievable: Investigations into Ghosts, Poltergeists, Telepathy, and Other Unseen Phenomena, from the Duke Parapsychology Laboratory*, the Rhines published their account of Crandon’s fakery in 1927 in the *Journal of Abnormal and Social Psychology*, making “an argument that would be turned against them for the rest of their lives”: “If we can never know to a relative certainty that there was no trickery possible, no inconsistencies

present, and no normal action occurring, we can never have a science and never really know anything about psychic phenomena.”

What Rhine wanted was proof—verifiable, scientific, replicable proof. But this put him in a kind of no man’s land. He was too skeptical to be a glassy-eyed believer, willing to mistake goose fat-covered cheesecloth for ectoplasm, but not so skeptical that he dismissed the entire possibility of psychic phenomena. At the same time, religion had no use for his work and may even have seen it as a threat; Horn noted that if Rhine’s work was successful, it might offer up alternative explanations for phenomena previously considered miraculous. “If you look at it, both sides were rooting against him,” she said in a recent phone conversation.

What Rhine did have going for him, however, was sheer force of character. Passionate about his research, led by his understanding of scientific method, and supported by his wife and partner who believed in his work just as strongly as he did, Rhine was ideally suited to drag psychic phenomenon away from the tipping tables and Ouija board and into the world of science.

In 1927, McDougall, Rhine’s mentor in psychology and psychical research, moved to Duke University; the Rhines soon followed. Rhine taught psychology as an instructor, but the bulk of their work in the first few months was devoted to analyzing the copious records of a man called John Thomas, who had compiled 750 pages of notes on conversations he had with his late wife via spirit mediums. Rhine satisfied himself that the mediums referred to information about Thomas and his wife that they could not have accessed through conventional means. But, he noted, that didn’t mean the information was actually coming from the deceased – it could just as easily be coming from Thomas’s mind.

This, to Rhine, was a much more plausible avenue for research: the ability of the human mind to gain information outside of basic limiting principles such as time, space, and physics. These abilities, which he was convinced existed, he termed “extra-sensory

perception.” He did that, he wrote at the time, “in order to make it sound as normal as may be.”

Rhine abandoned the search for proof of survival after death and instead began to focus on ESP. His first efforts at testing telepathy were informal: He used a numbered card or a normal playing card to see whether subjects—regular people, usually students, and not mediums or people who had built a reputation as being psychic—could guess the card without seeing it. What he found, however, was that people tended to have favorite cards, and would suggest those rather than try to really guess what card was being held up. Rhine wanted an entirely new set of cards, featuring images that had no previous associations in the minds of his subjects. For this, he turned to his colleague in the psychology department, psychologist Dr. Karl Zener.

Zener, whose usual work focused on conditioned responses (think Pavlov’s dogs), selected the five simple symbols—the star, the square, the circle, three wavy lines, and the cross—because people didn’t seem to have a bias towards any one. The Zener deck came with five sets of the five symbols, meaning that the chances of guessing the first card correctly was one in five, but the chances of making 10 or more correct guesses in a run of 25 cards was about one in 20.

“Nothing magical about the method, but it was simple, could hold attention, subject to evaluation, etc.—a paradigm for how ESP could be tested,” explained Feather. Feather, who was born in 1930, grew up at Duke with her father’s work. She remembers her mother using the Zener cards to test neighborhood children around the kitchen table in their Durham home.

The tests were fun and popular with the Duke students, so they had no shortage of subjects; in 1931 alone, Rhine conducted 10,000 ESP tests with 63 students, many of whom he found scored better than chance. Some scored so well above chance so as to be statistically significant, including Duke divinity graduate student Hubert Pearce—who once made 25 consecutive correct guesses, a full run of the Zener deck. Meanwhile, Rhine had begun to gather a team of graduates and undergraduates who were intrigued

by his work. Feather recalled a palpable energy among the new parapsychology researchers; when they got a remarkable result “they’d be running in and out and jumping up and down... They were just excited about what they were doing.”

In May 1934, Rhine published *Extra-sensory Perception*, a book analyzing his by then 90,000 ESP trials. According to his 1981 obituary in the *American Journal of Psychology*, the book created “both a popular and professional stir. The popular reaction was largely uncritical and approving; the professional one was the opposite.” By the following year, Rhine’s work saw a massive boost when a wealthy patron gave him and his lab \$10,000 a year for two years, with the possibility of extending that to \$10,000 a year for five years if all went well. With the money, Rhine set up his own lab, still under the Duke auspices but separate from the psychology department. Thanks to his donor, the lab the most well-funded in the university—his budget was one-tenth of the entire Duke budget, Horn reported in her book.

That Rhine was able to conduct this kind of research, and be so well supported in it, had a lot to do with when and where he was doing it. For one thing, Duke was a new university and was, as Feather suggested, more open to exploring new, unestablished science. And secondly, though most contemporary scientists were not interested in Rhine’s research, some big names were. People like William James, Thomas Edison, and Sigmund Freud all entertained some degree of fascination with the paranormal, although some were less open about it than others.

Einstein’s discoveries, Horn noted, had cracked open a realm of unseen possibilities and scientists at this time were less closed to explanations that seem to defy basic limiting principles and established physical laws. Most of mainstream science was still hostile to the study of parapsychology—Horn described much of Rhine’s correspondence from other scientists as “vicious and nasty.” But in some ways, the scientific community had never been more open to the idea that Rhine’s research could be valuable.

Meanwhile, the general public’s appetite for ESP research was seemingly limitless. By 1937, you could buy Zener cards from the local newsstand for 10 cents a pack. Rhine’s

new book *New Frontiers of the Mind* was chosen as a Book of the Month Club selection, ESP experiments became the subject of radio shows, and everyone wanted to talk about telepathy. “The average American was more open to his results than the average scientist,” Horn said.

Rhine’s reputation as the country’s preeminent parapsychologist meant that people who’d had weird, inexplicable experiences or felt that they had abilities that others did not thought of him as their champion—a scientist who was, to paraphrase *Ghostbusters*, ready to believe them. “Every time something strange would happen, people would write the lab. It was the only game in town—the letters are like a 30-year history of everything weird happening in America,” said Horn.

But popular acceptance and the tentative embrace of established science were not enough to cement parapsychology as an “acceptable” discipline. Despite the initial promise of the lab, and the hundreds of thousands of trials that Rhine and others believed established the validity of ESP, parapsychology still had the taint of occult. The distance between Rhine and established science grew. Zener, who spent the rest of his career at Duke as a perceptual psychologist and later became chair of the department, asked that the cards no longer be called “Zener cards,” because he no longer wanted to be associated with Rhine’s ESP research (it didn’t entirely work—though the Lab made an effort to call them “ESP cards,” the popular audience that had adopted the cards tended to stick with the original name). McDougall, Rhine’s champion and mentor, and William Preston Few, the Duke president who agreed to Rhine’s lab, had both died; the Parapsychology Lab was funded from outside sources (including the Office of Naval Research, the Army, and the Rockefeller Foundation), but its lack of support within the university still put it in jeopardy. In 1948, the Lab became a non-teaching independent unit within the University, losing its access to graduate students and further distancing itself from the school.



When Rhine retired in 1965, the lab closed. He founded a nonprofit research center, the Foundation for Research on the Nature of Man, to continue the research, and continued to be involved in ESP research until his death in 1980. The Rhine Research Center still exists, in a tidy red-brick office park in Durham; it still uses (and sells, [via the website](#)) Zener cards. Its mission remains to explore the “frontiers of consciousness and exceptional human experiences in the context of unusual and unexplained phenomena,” although there is somewhat less funding available to conduct that exploration than in the past. “In recent years, there is more work on bioenergy work, macro-PK including occasional field investigations of such, qualitative studies of case material,” Feather, who is on the Board of Directors of the Center, wrote in an email. The question that sparked Rhine’s initial interest in psi phenomena—does consciousness survive after death?—is not among the Rhine Center’s research topics: “The Rhine has enough of a job with the topics we started with,” said Feather.

Despite the Center’s continued work, it’s not clear exactly what Rhine’s legacy will be. “I think he brought legitimacy to the murky world of the paranormal by setting standards for a new experimental science,” Feather wrote in an email. “He created a standard method so that hundreds of replications were possible here and elsewhere, a standard vocabulary, a professional peer-reviewed journal (1937 to present), a graduate training program, and ultimately an international organization. He used the same techniques found in professional psychology of his day, much improved now.” His *AJP* obituary

lauded him for establishing a middle ground between science and psi, in which real research could continue.

Horn, however, says it's a bit more complicated. If you accept that psi ability is scientifically valid, then Rhine's lab was never able to answer the one question it needed to: how psi abilities worked. "Without the ability to control and enhance them, which was probably the military's interest, funding starts to dry up," said Horn, calling the mechanism of psi the lab's "Holy Grail." And if you don't accept that psi ability has any basis in science, then it's a different picture all together: "I think he's always a tragic figure, because for all that he did to refine the controls and analyze his results, he did not get the respect that he deserved," Horn said.

Today, what seems most remarkable is that Rhine was able to establish a paranormal research center at all. To suggest that this research is on the fringes of the established scientific community would be an understatement: The National Science Foundation, in its surveys on public perception of science, refers to ESP and psychic ability as "pseudoscience." The official case for the existence of "real" ESP or psi abilities is considered tenuous; attempts to replicate studies that seem to prove psi have not been consistently successful. "Parapsychology doesn't pay well, carries a stigma, and it's not wise for a young person to risk this as a career path," Feather acknowledged.

But Horn, and certainly Feather and her father, might say scientists are not giving psi a fair shake. "So many [scientists] that I talked to were all, 'This all junk science, period, end of story,' and they actually don't study the work," said Horn. "I am somewhat sympathetic with that because there is a lot of junk science out there, but you're certainly not going to win hearts and minds by belittling people... I'm skeptical, but I researched [the Rhines'] experiments and found that all the reasons that people used to discount them were not valid. I'm kind of like Rhine, 'Okay, these are interesting effects, but we can't explain them, but nonetheless they're real.' You would think you would want to find out." With few exceptions, she said, no one she talked to in researching her book seemed interested in finding out. "That doesn't mean anything necessarily paranormal is going on, but something is going on, why not look into it? There is so

much going on in the physical world that we don't understand, this might give us a clue.”

Still, just as it was in Rhine's day, even if established science dismisses ESP and psi, the general public remains fascinated by it. A 2011 [YouGov poll](#) found that 48 percent of Americans believe in ESP, more than believe in ghosts or reincarnation. And, just as you could in 1937, you can buy your own pack of Zener cards, thought for considerably more than 10 cents. However much on the fringe parapsychology is, it looks like it will always have a home.

Retrieved from: <https://www.atlasobscura.com/articles/how-one-man-used-a-deck-of-cards-to-make-parapsychology-a-science>

STATION INSTRUCTION CARDS

Station 1: **Zener cards**

1. Each student should take a sheet of cards, cut them out and shuffle them.
2. Students pair up and take turns playing the roles of parapsychologist and subject for each round.
 - a. Round 1: Parapsychologist holds a card so that the subject cannot see which image is printed on it but they should attempt to project the image on the card into the mind of the subject. Subject should concentrate, attempting to visualize in their mind what image is on the card, before making a guess. Parapsychologist takes notes of correct/incorrect guesses. Repeat 5 times, pulling a random card from the deck each time. Students switch roles and repeat.
 - b. Round 2: Repeat the above experiment but this time the parapsychologist will reward the subject with an M&M or Skittles candy for each correct guess.
 - c. Conduct further experiments of your own making as time allows.

Station 2: **Dice rolling**

1. Students should pair up and choose the role of parapsychologist or subject (they will switch roles later).
 - a. **Round 1:** The subject should choose one of the dice that they feel is calling out to them (be sure that the subject is aware of the number of sides on the dice or coin). The parapsychologist will roll the die or flip the coin 5 times. The subject should make a prediction of what the outcome of the dice roll will be. As the parapsychologist rolls the dice, the subject should attempt to mentally influence the outcome of the roll to be their predicted number. Both students take notes on the outcome of each roll. Students then switch roles and repeat.
 - b. **Round 2:** Repeat the above experiment but this time the parapsychologist will reward the subject with an M&M candy for each correct guess.
 - c. Conduct further experiments of your own making as time allows.

Station 3: **Spoon bending-**

Students should watch the video silently, saving comments, judgements or beliefs until after each of their teammates has attempted to bend a spoon using the following instructions. Save any comments that may influence the beliefs of others until later.

1. Observe the available spoons on the table. Use your feelings and let them tell you which spoon will bend.
2. Hold the spoon vertical and look at it and ask it to bend. Or say you will bend for me. Really believe it.
3. Breathe in and breathe out. Breathe in positive energy.
4. Breathe out negative feelings
5. Keep doing this for about 15 breaths while massaging the spoon just below the bowl of it.
6. Make yourself lightheaded while really concentrating on your breathing and producing energy and thinking the spoon will bend.
7. Then at the point of when you feel you're ready with all thoughts clear except the spoon get ready
8. Look at the spoon for about 2 seconds and think you will bend for me, while still breathing, breathe faster and hype yourself up.
9. Look out the window or at something for about 1 second and start to bend the spoon, and say very loud BEND! BEND! BEND! (really get into it) you will notice that the spoon becomes like rubber.
10. Your spoon will feel like rubber and it will bend for you.
11. After you have bent the spoon around two or three times, lay it down and wait about 1 min. the spoon will harden again.

Station 4: **Ganzfield Experiment:**

The idea behind the Ganzfield experiment is that if you block off your sight, hearing and touch than your brain will fill these in for you. Your brain may create images or sounds on its own.

1. Cut out the mask shape.
2. Use the hole punch to make holes on either side.
3. Tie a piece of string through each hole.
4. Glue 6 or 7 cotton balls along the bottom of the mask along the grey area.
5. Take turns being parapsychologist and subject.
6. Play the youtube white noise video and let the subject wear the earphones.
7. Subject just put on the mask and then the oven mitts.
8. The subject should remain like this for 3 minutes or so.
9. At the end the subject should describe any thoughts, visions or sensations that they experienced in their mind.

Station 5: **Purkinje Lights**

(Famous brain or neuro-scientist Jan Purkinje stumbled upon this mind experiment as a child).

- a. Students take turns closing their eyes and tilting their head towards the sun or any other bright light while their eyes remain closed.
- b. The subject should then wave their hand quickly in front of their eyes back and forth for an extended period of time.
- c. The subject should begin to see simple colored spots or shapes appear behind their eyelids. These shapes should become more and more intricate and detailed as time goes on.
- d. When the subject tires or after 2 or 3 minutes have passed, one of the parapsychologists should stop the subject who will then describe anything that they saw or experienced.
- e. Subject and parapsychologists take notes and then repeat the experiment with the next member of the group playing the role of the subject.

Station 6: **Dowsing**

(Dowsing is a way that many people claim to be able to use their mental powers to find water that is beneath the ground, so that people know where to dig a well. Others believe that you can find anything by dowsing including lost car or house keys).

- a. Watch the video 1st if you would like.
- b. DO NOT POKE ANYONE WITH YOUR DOWSING RODS.
- c. Each member of the group should take turns attempting dowsing.
- d. Follow the instructions in the video...Try to convince yourself to believe that this will really work before you begin. Ask your dowsing rods how they will show you what movement signifies a no and which movement might signify a yes.
- e. Hold out your dowsing rod at arm's length and ask them to lead you to the nearest water source. Do not grip your rods too tightly.
- f. Walk back and forth around the room holding your rods parallel to the ground at arm's length (they should not dip up or down). The rods should also be about 9 inches apart.
- g. The rods should either point towards a water source after a time or cross one another to form an x if you are at or above a source of water.
- h. Try the experiment again with a hidden item. Give your group members any small item. They should hide the item somewhere in the room and you should attempt to use dowsing rods to find the item.
- i. After each group member has tried, members should silently record individual notes before the next team member attempts the experiments.

Dept. of Parapsychology: Notes and Data

(Write and/or draw what you see)

BEFORE THE EXPERIMENT


























1. After reading the description of this experiment, what do you believe that the outcome will be?
2. Why do you believe that?

DURING AND AFTER THE EXPERIMENT

1. What do you believe is happening here?
2. What does it mean?
3. Why do you think that?
4. What does it prove?
5. Why do you believe that?

Tips:

- Focus on your beliefs and how they relate to the beliefs of others
- Include unanswered questions

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Name: _____

Date: _____

Performance Task

You are a television writer and director who specializes in coming up with ideas and scripts for new documentary tv shows. Two of your good friends have proposed a great idea to you about a mysteries, legends and folktales documentary series that focuses on your home state of North Carolina! The three of you have travelled the state together on many occasions and collected quite a few strange local stories along the way, so there is plenty to write about but there is one problem. Your one friend Lucy is an experimental psychologist at Duke who believes that she can explain any paranormal phenomenon using science and logic. Your other friend Miguel works as a parapsychologist at the Rhine Research Center and he believes that there is plenty of evidence to support the fact that there are unexplainable phenomenon all around us and that some claims should not be dismissed merely because there were only a few witnesses available.

You mentioned Lucy and Miguel's idea to a TV Executive who you have worked with before at the History Channel. The TV Executive thinks that viewers will really love the opposing beliefs that Miguel and Lucy have about unexplained phenomenon in general so she really wants to make that a big part of the show. She gives you specific instructions on how to play up this angle in each episode in the directions below.

Your job is to create a slideshow using Google Slides that your TV Executive friend can show to the Producers at the History Channel (who make all the big decisions about which TV shows actually get made). Your slideshow should include an introduction to the series and proposals for the first three episodes. With the introduction and previews of the first three episodes, you should have 4 slides at minimum.

Directions for the introduction to your new television series:

- Your introduction should explain the basic premise of your show in an interesting way.
- Be sure to include an explanation of how your show will explore the idea that beliefs shape truth.

Directions for each of the 3 episode previews:

- Choose a North Carolina mystery, legend or folktale as the topic and give a brief explanation of the story or phenomenon.
- Give sample questions that you will ask witnesses or experts on each episode that will help viewers understand how they arrived at their version of the subjective truth.
- You will work together with Lucy and Miguel to write a true statement that they can both agree on which you will share at the end of each episode. Part of this statement should include commentary on how all three of your beliefs, along with the beliefs of the writers and witnesses (from the articles/websites/books that you read) who shared the story with you have shaped this version of the truth.
- Remember that you are trying to pitch a TV show idea so make it interesting and include images or video on every slide to make it more engaging* and visually appealing.

*Below I have included several websites with tips for pitching a television series:

- <https://www.wikihow.com/Write-and-Pitch-an-Idea-for-a-TV-Show>
- <https://www.scriptreaderpro.com/how-to-pitch-a-tv-show/>

**We will work on this at the end of class each day :^)

Ethan Montgomery-6/21/19

V. Unit Resources

Lesson 1- *Taba: Judaculla Rock*

- *Judaculla Rock [Painting]. (n.d.). Retrieved from <https://peopleofonefire.com/judaculla-rock-the-meaning-of-these-petroglyphs-is-solved-by-linguistics-and-some-knowledge-of-history-elsewhere.html>* This is an artists rendering of Judaculla Rock that clearly depicts many of the petroglyphs.
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Lesson 2- *Simulation: Objectivity and Bias in Journalism*

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