

# Unexplained Phenomena

#### Mystery Impacts Reality

Can you explain the unexplainable? Do you like puzzles? Then you are a fan of unexplained phenomena! Work with your curious classmates to answer puzzles that have baffled humans for years. What do Big Foot and the Loch Ness Monster have in common? What about the ancient Egyptian Pyramids and Stonehenge? Come find out more about these mysteries and others and come to your own conclusions about them.

By Wendy McKinney / Grades 5-7 / August 2017

#### Introduction

#### Rationale -

The world is full of wonders, mysteries, and unusual incidents. Students in grades 5-7 are often fascinated with the unusual and try to figure out how or why something happens. This unit challenges students to consider the unusual, the mysteries, and the secrets of our world – both real and imagined. Throughout this unit, the suggested activities show how you can help students achieve goals, and outcomes for ELA standards in the imaginative and literary context. The learning activities in this unit can be adapted based on the interests and needs of your students (from class to class and from year to year).

At the end of the unit students are asked to reflect on all the wonders and mysteries that they have read or heard about during the unit of study. Which did they find the most interesting? Why? About which mystery would they like to learn more? Why? They are then asked to prove their point of view on a mystery of their choice. They must be persuasive and create a product that will persuade others to believe what they believe to be true.

Students will also have opportunities to delve deeper into other mysteries that interest may interest them. As you implement this unit with students, you can adjust the lessons to meet the needs of your students. Students can create their own learning outcomes and products if that fits the need of your class.

The unit is organized around the essential question "How does mystery impact reality?" this question drives each lesson. Approximately 1-2 weeks could be spent on the unit, with extended time devoted to end-of-unit activities. (Time allocations given are approximations only. Teachers can choose to spend more or less time on each lesson depending on the needs and interests of their students.) This unit looks at the real (and imagined) mysteries and unusual incidents of life and nature.

This unit will delve into questions that will bring about deeper understanding of varies mysteries.

Questions for Deeper Understanding that will be addressed in the unit • What are some of the unsolved mysteries and unexplained events of our world? • Why do people find mysteries fascinating? • What is there about people that lead them to pursue a mystery? How do the great mysteries of the world impact our reality?

#### Differentiation for Gifted Learners –

This unit is designed with differentiation for gifted students throughout. The unit looks at content, process, product, and learning environment and the features of differentiation: complexity, challenge, depth, creativity, and acceleration.

Content - Content consists of the ideas, concepts, descriptive information, and facts that are being taught. Content, as well as learning experiences, can be modified through various ways. This unit allows for flexible pacing, and the study of more advanced and complex concepts that lead to depth in the subject matter. This unit is broad and encourages them to investigate and learn about multiple subjects all relating back to an essential understanding. Students are able to make connections across subjects to understand and delve into the mysteries that surround us.

**Process** – In this unit the activities are structured to be intellectually demanding. Students are challenged to prove their thoughts not just except ones beliefs. The lesson plans provide open-ended questions that stimulate inquiry, active exploration, and discovery of new ideas. Thinking about various unexplained phenomena leads to so many complex questions which will drive the lessons and student inquiry. Using Bloom's high order questions along with models of lessons that encourage higher level thinking skills, this unit will provide gifted students with a challenging, in-depth and engaging experience.

**Product** – This unit encourages students to demonstrate what they have learned in a wide variety of forms that reflect both knowledge and the ability to manipulate ideas. For example, students are encouraged to give an oral presentation, create a video, brochure, commercial, newspaper article, or interactive slideshow to prove that your stance on this mystery is concrete

and reliable. Providing students with choice allows for each student's preferred learning style to be showcased. The product addresses a real topic of interest and an authentic audience of peers with many of the same thoughts and beliefs. Students are encouraged to be reflective about their thinking and products.

Learning Environment – The learning environment for this unit is student centered and encourages inquiry. During the lessons students are working with groups or independently with a wide variety of materials. The lessons encourage creativity and questioning throughout. The unit works to let students see how mysteries can impact our reality which lets them bring in real world thinking to their learning.

Population – This unit was designed for a group of gifted students in Rockingham County, North Carolina. They range in grade levels from 5<sup>th</sup> grade to rising 9<sup>th</sup> graders. The unit was designed for a week long summer camp program for gifted students that attend any school within the county. The socioeconomic background of the students did vary within my classroom. However, the interest level with this subject matter of "Unexplained Phenomena" did not vary. They were all very intrigued with the lessons that were taught during the week and wanted to gain deeper knowledge on the subjects. The students were abstract thinkers and insightful about the topic. They asked many probing questions which led to in-depth conversations and research. Many displayed a passion for experimenting and doing things a little differently. Many of the students had a quirky sense of humor which led to many laughs and deep thoughts in some cases. Overall the class had vivid imaginations which led to a great implementation of this unit of study.

# **Rockingham County Public Schools Overall Information:**

**Number of RCS Schools: 25** 



Elementary (PreK-5) - 15 Middle (6-8) - 4 High (9-12) - 4 Early College (9-13) - 1 Alternative School – 1

# "ASPIRE" Summer Camp Student Information

12 students / 4 Females / 8 Males / All White **ASPIRE CLASS** 



# **Cost of Living in Rockingham County Information**

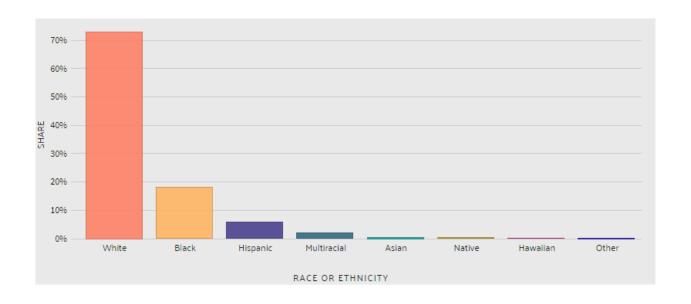
The Cost of Living Index estimates the relative price levels for consumer goods and services. The cost of living is 14.9% lower in Rockingham County, North Carolina than the U.S. average.

Cost of Living Information			
Annual Average Salary Cost of Livin (Base U			
Rockingham County, North Carolina	\$33,912	85.1	
North Carolina	\$46,042	91.3	
USA	\$52,285	100.0	

# **Race and Ethnicity Information for Rockingham County**

Over 70% of Rockingham County is White with the African American population at near 18%. The Hispanic population is around 5%.

Population By Races			
Race	Population	% of Total	
Total Population	93,643	100	
<u>White</u>	70,875	75	
Black or African American	17,655	18	
Hispanic or Latino	5,159	5	
Some Other Race	2,608	2	
Two or More Races	1,670	1	
<u>Asian</u>	430	Below 1%	
American Indian	345	Below 1%	
Three or more races	128	Below 1%	



# **Goals and Outcomes**

#### **Content Goals and Outcomes:**

- ❖ Students will learn about many of the great mysteries of the world. They will look at the impact that these mysteries have on reality. Students will be able to.....
  - discuss what makes something a mystery versus what makes it a reality
  - analyze facts and information and draw inferences from various sources about mysteries and how they impact reality
  - Examine different perspectives on various mysteries

#### **Process Goals and Outcomes:**

- ❖ They will develop reasoning skills that lead them to deeper understanding of how mysteries impact reality. Students will be able to ....
  - Use creative problem solving skills to express complex concepts
  - Evaluate ideas and different points of view in order to determine the impact of the legend on society
  - Formulate multiple perspectives on the mystery
  - Analyze observational data to create generalizations

# **Concept Goals and Outcomes**

- ❖ The students will work to understand the concept of mystery. Students will be able to ...
  - Use spoken, written and visual forms of communication to effectively discuss issues surrounding mystery
  - Craft questions and maintain an inquiry based dialogue which deeply examines ideas and concepts about mystery
  - Access, organize and apply information relating to the concept of mystery

# Common Core Standards / Based on 5th Grade ELA

# **Speaking and Listening**

CCSS.ELA-LITERACY.SL.5.1.C Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.

CCSS.ELA-LITERACY.SL.5.2 Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

CCSS.ELA-LITERACY.SL.5.3 Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.

## **Reading Literature**

CCSS.ELA-LITERACY.RL.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.

CCSS.ELA-LITERACY.RL.5.6 Describe how a narrator's or speaker's point of view influences how events are described.

CCSS.ELA-LITERACY.RL.5.7 Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g., graphic novel, multimedia presentation of fiction, folktale, myth, and poem).

#### **Reading Information**

CCSS.ELA-LITERACY.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.

CCSS.ELA-LITERACY.RI.5.6 Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.

CCSS.ELA-LITERACY.RI.5.9 Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.

Google Presentations I created to help guide goals and content for each day are linked below.

Day 1

 $\frac{https://docs.google.com/presentation/d/1fW8oPFBr9IuIkB63n7fbc83dRwSreSMh2}{VRoNeAad8Q/edit?usp=sharing}$ 

Day 2

 $\frac{https://docs.google.com/presentation/d/1GwexloYFOrxPL2Cb9R-q3m-Tn9-TbRurECk3bpl0QZY/edit?usp=sharing$ 

#### Day 3

https://docs.google.com/presentation/d/1iGWEZFfK5NPO9cxo2bd9bayNwCJ9owqa TZtawuHr63g/edit?usp=sharing

#### Day 4

https://docs.google.com/presentation/d/1Xp9CL IXbNr3uaTjjT9USFBZEwEGhxuvif5LVWZZ9nY/edit?usp=sharing

#### **Assessment Plan**

Within the unit there are formative assessments each day to ensure for student understanding. The unit wraps up with a performance task assessment. The various instructional models used for lesson development leads to various opportunities for formative assessment.

## Day 1

Students are provided a blank piece and a writing tool. Students are instructed to write about a mythical creature that we have discussed or learned about and state whether or not they believe in this myth or not. They will describe why they choose the stance they take for or against the myth. Do they believe that mysteries impact reality? How do mysteries change what people feel and do? They will also be able to draw pictures of their mythical creature.

Students are assessed on a rubric which includes: Identification of a mythical creature that we have learned about Details about creature Stance for or against the myth





# Day 2

Students will work in their original small groups (groups of three or four members who prepared five questions of use in the seminar and participated in silent close reading together.) Students will research, collect, organize and analyze data which will enable them to:

• Create a timeline of Bigfoot theories and sightings throughout history

Changes over Time / Connecting Points in Time
How and why do things change about Bigfoot? What doesn't change?

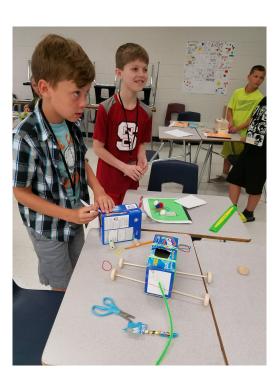
# Day 3

As the students design and build their own version of an ancient transport system, show them to the **engineering design process** — a series of steps that engineering teams use to guide them as they solve problems.

1. *Understand the need:* What is the problem? What do I want to do? What are the project requirements? What are the limitations? Who is the customer? What is the goal? Gather information and research what others have done.

- 2. *Brainstorm and design:* Imagine and brainstorm ideas. Be creative. Investigate existing technologies and methods to use. Explore, compare and analyze many possible solutions. Select the most promising idea.
- 3. *Plan:* Draw a diagram of your idea. How will it work? What materials and tools are needed? How will you test it to make sure it works?
- 4. *Create:* Assign team tasks. Build a prototype. Does it work? Talk about what works, what doesn't and what could work better.
- 5. *Improve*: Talk about how you could improve your end product. Make revisions. Draw new designs. Make your product the best it can be.

Engineers explore all possible options and compare many design ideas. This is called open-ended design because when you start to solve a problem, you don't know what the best solution will be. Engineers use prototypes, or early versions of the design to improve their understanding of the problem, identify missing requirements, evaluate design objectives and product features, and get feedback from others. Engineers select the solution that best uses the available resources and best meets the project's requirements.











#### Performance Task for the Unit

# **Prove It**

Imagine that you have the opportunity to prove or disprove one of the great mysteries of world! With your knowledge you will be able to shape minds and make believers or disbelievers change their mind set forever. You will pick your perspective role from a list and then target your audience. Your job is to make an oral presentation, video, brochure, commercial, newspaper article, or interactive slideshow to prove that your stance on this mystery is concrete and reliable. You must convince your audience that what you say is the truth!! Be sure to include facts to show how you arrived at your conclusion!! Be creative but mostly be persuasive!! PROVE IT!!!

Choose your role and then present to your target audience.

Example: Tour Guide – Tourist

#### **Roles**

Advertiser Author

Detective Eye Witness Filmmaker Forest Ranger Photographer Reporter Scientist Tour Guide Travel Agent



LINKS to student work samples

**BIGFOOT** 

# **Video Projects Created by Students**

https://drive.google.com/file/d/0B7a21sjOEIoGUHpxRmJYNDNNbVE/view?usp=sharing https://drive.google.com/file/d/0B7a21sjOEIoGMTVzQ1hjLWE3MTA/view?usp=sharing

# **Google Slideshow Projects Created by Students**

https://docs.google.com/presentation/d/1Tl0uJS8d2iZYiUkgR4rDRSN-y7FUgUFGXHMYfyi6SQg/edit?usp=sharing

https://docs.google.com/presentation/d/15GLgPnv4N3x-ByXweFy7tCivEsYcYkeZSj4wJCb8wyw/edit?usp=sharing





TEACHER NAME			Lesson #
Wendy McKinney			
			1
CONTENT AREA GI		CONTENT AREA GRADE LEVEL	
ELA/Science		5 <sup>th</sup>	
LESSON TOPIC			
Mysteries: Fact or Fiction			
	Wendy McKin	CONTENT AREA ELA/Science	Wendy McKinney  CONTENT AREA GRADE LEVEL ELA/Science 5 <sup>th</sup> LESSON TOPIC

#### **LEARNING OBJECTIVES** (from State/Local Curriculum)

#### CCSS.ELA-LITERACY.SL.5.1.C

Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.

#### CCSS.ELA-LITERACY.SL.5.2

Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

#### CCSS.ELA-LITERACY.SL.5.3

Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.

THE ESSENTIAL UNDERSTANDING (What is the overarching idea students will understand as a result of this lesson?	THE ESSENTIAL QUESTION (What question will be asked to lead students to "uncover" the Essential Understanding)
Mystery impacts Reality	How do mysteries impact reality?
CONTENT KNOWLEDGE (What factual information will students learn in this lesson?)	PROCESS SKILLS (What will students be able to do as a result of this lesson?)
<ul> <li>Communication is achieved when information is exchanged through written and visual imagery.</li> <li>Myths have existed in every society.</li> <li>Fables, fairy tales, folktales, sagas, epics, legends, and etiologic tales are all examples of myths.</li> <li>Mythical beast tales have been told all over the world.</li> </ul>	<ul> <li>Students will be able to use spoken, written and visual forms of communication to effectively discuss issues surrounding myth.</li> <li>Students will be able to access, organize and apply information</li> <li>Students will be able to use creative problem solving skills to express complex concepts.</li> <li>Students will be able to discuss the difference between myth and reality.</li> </ul>

#### **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

include both lesson plan lever questions as well as questions designed to galae stadents to the essential understanding				
Pre-Lesson Questions:	During Lesson Questions:	Post Lesson Questions:		
What types of pictures did you draw? How did you decide what you would draw? What meaning does your drawing have to you? What do you think any artist wants others to know by what is included in his/her artwork? What did you reveal about mythical creatures in your artwork? What makes them mythical? Could your creatures be real or are they only myth. Explain your thinking. Why might people publicize pictures such as this?	What do you think is going on in this picture? What do you see that makes you say that? What else can you find in this picture? What do you think is important in the picture? Is the picture a picture of reality or myth? Why? Why might people think it is real?	What positions do the people and animal in the picture hold? What are the differences between the characters in the picture? What does the picture tell us about mythical creatures and the perception people have of them? Why do you say that? How does the mystery of the creature impact reality in this picture? Why do you feel this way? What other pictures have you seen that are like this one? What are your thoughts on whether or not the picture could be real?		
DIECEDENTIATION				

#### **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
	Students use	Students have to	
	observation and	create drawings of a	
	critical thinking to	mythical creature they	
	create individual and	imagine or vision.	
	personal meaning by	This allows for	
	using the Virtual	creativity and	
	Thinking Skills model.	individuality.	

#### 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**

Icebreaker Activity - Meeting Your Match

On the first day to break the ice as a class we will do an icebreaker activity. The challenge each student has it to find another classmate that matches them.

Here's how this activity works: As students enter the classroom, hand each child a puzzle piece. Once students are settled in, instruct them to walk around the room to each classmate to see if their puzzle piece fits with another students' piece. As they go from student to student, they must introduce themselves and tell one important fact about themselves. At the end of the activity each "match" must introduce one another and tell the class about the facts that they have learned.

We will use the puzzle later in the lesson and put it all together.



- 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.

In the first part of the lesson the teacher provides a sheet of blank paper and markers. She/he instructs students to draw a picture of a scene depicting a mythical creature. After five minutes of drawing time, the teacher asks the pre-lesson questions.

Background: Students have studied how myths and mysteries may not just be wishful thinking, but rather a quest for an understanding of the significance of nature and life. Myths and mysteries often contribute heavily to our perceptions of how the world works, so it's necessary to debunk the myths that may lead people to false assumptions. The lesson will focus on letting students decide whether myths are factual and how they impact reality. We can discuss how fake news is having such an impact on our political climate right now and how verifying sources becomes very important.

The teacher asks the pre-lesson questions. The teacher allows time for students to respond to questions.

What types of pictures did you draw?

How did you decide what you would draw?

What meaning does your drawing have to you?

What meaning do you want others to get from your drawing?

What do you think any artist wants others to know by what is included in his/her artwork?

What did you reveal about mythical creatures through your artwork?

**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.

The teacher reveals, painting of Loch Ness Monster creature with a child and an adult in the picture on the Activboard. The teacher gathers students around the picture and instructs them to observe the painting without speaking. The teacher allows three minutes for students to observe the painting in silence.

**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.

After three minutes of observation, the teacher asks the during-lesson questions. The teacher allows time for students to respond to the questions. Time is allowed for students to comment and to expand on comments made by the peers.

What do you think is going on in this picture?

What do you see that makes you say that?

What else can you find in the picture?

Who are the people in this picture?

What do think the people in this picture are feeling?

How do you feel about the people in this picture?

Responses should identify that the picture reveals people, perhaps from artist from the area of Scotland where the Loch Ness monster is said to live. The boy seems not to fear the monster but the adult seems to have great fears.

**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

Working and Thinking on a Deeper Level

Students are divided into groups. They are provided with cards that have the post-lesson questions. Students are instructed to read, discuss and record their responses to the questions on the cards. After 10 minutes, the teacher asks groups to share their responses, question by question. Discussion is facilitated by the teacher as she/he asks probing questions.

#### **Unanswered Questions**

???

What information is unclear, missing, or unavailable?

What evidence do you need to prove that the picture is real?

What has not yet been proven?

Why do you say that?

What else do you see that lead you to that decision?

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

Summary of the lesson is provided by the teacher:

What do you think the artist is trying to tell us about the people and the events in this painting?

How is the myth of the Loch Ness Monster depicted in this painting?

How does the painting differ from our puzzle picture of the monster?

What other myths of mythical creatures have happened in history?

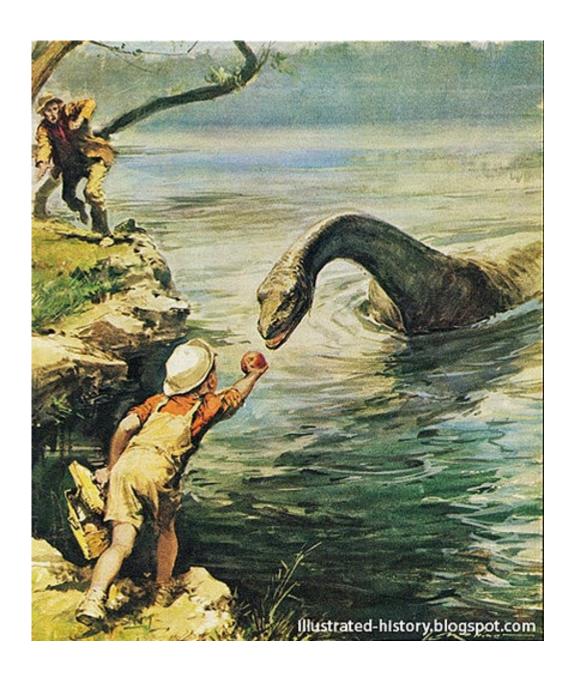
What myths exist today?

How would you describe them?

Discussion and research time is allowed to answer the above questions.

Students are provided a blank piece and a writing tool. Students are instructed to write about a mythical creature that we have discussed or learned about and state whether or not they believe in this myth or not. They will describe why they choose the stance they take for or against the myth. Do they believe that myths impact reality? How do myths change what people feel and do?

Students are assessed on a rubric which includes: Identification of a mythical creature that we have learned about Details about creature Stance for or against the myth



TEACHER NAME				Lesson #
Wendy McKinney			2	
MODEL	MODEL CONTENT AREA GRADE LEVEL			
Socratic Seminar	ELA		5 <sup>th</sup>	
CONCEPTUAL LENS			LESSON TOPIC	
Mystery		Th	ne Notorious Bigfoot	

#### **LEARNING OBJECTIVES** (from State/Local Curriculum)

#### CCSS.ELA-LITERACY.RL.5.1

Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.

#### CCSS.ELA-LITERACY.RL.5.6

Describe how a narrator's or speaker's point of view influences how events are described.

#### CCSS.ELA-LITERACY.RL.5.7

Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g., graphic novel, multimedia presentation of fiction, folktale, myth, and poem).

THE ESSENTIAL UNDERSTANDING	THE ESSENTIAL QUESTION		
(What is the overarching idea students will understand as a result of	(What question will be asked to lead students to "uncover" the		
this lesson?	Essential Understanding)		
Mystery Impacts Reality	How do mysteries impact reality?		
CONTENT KNOWLEDGE	PROCESS SKILLS		
(What factual information will students learn in this lesson?)	(What will students be able to do as a result of this lesson?)		
Students will know:	Students will be able to:		
Students will know that the legend of Bigfoot has	Research and analyze facts and information and		
been around for hundreds of years.	draw inferences from text.		
,			
Students will understand what myths are and how	Evaluate ideas and different points of view in order		
they are perceived by various groups of people.	to determine the impact of the legend on society.		
	to determine the impact of the legend on society.		
Students will know the impact that myths have on	Collect, organize, and analyze research in order to		
reality.	evaluate and provide plausible solutions.		
	evaluate and provide plausible solutions.		
Students will analyze how visual elements	Craft questions and maintain an inquiry based		
contribute to the validity of legends and myths.	dialogue which deeply examines ideas and		
	1		
	concepts.		
	Use problem solving to provide solutions and		
	answers to unknown questions.		
CHIDING	DUESTIONS		
GUIDING QUESTIONS  What questions will be asked to support instruction?			
vinat questions will be us	nea to support motification.		

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

Pre-Lesson Questions:	During Lesso	n Questions:	Post Lesson Questions:
<ul> <li>What was happening in the videos you watched?</li> <li>How might the events depicted in the videos initially impact how people might think about legends and myths?</li> <li>What impact have the videos had on society?</li> <li>What is the relationship between mystery and reality?</li> <li>In what ways do the videos make us think critically about the mystery of Bigfoot?</li> </ul>	Why have any bones any bones any bones.     Why aren clear picts.     Do you be Patterson or why no Why is moscientists existence     Why are so in the Pace.     Do you the creatures considere Why or we Do you the real evide.	film is real? Why ot? ost main stream keptical of their ? so many sightings ific Northwest? ink these should be d dangerous?	<ul> <li>What was one theme or "big idea" you discovered through participation in this seminar?</li> <li>What generalizations could you make about the existence of Bigfoot?</li> <li>How did the seminar experience help deepen your thoughts on mystery vs reality?</li> <li>How was your thinking clarified in the seminar?</li> <li>What did I do well during the seminar?</li> <li>How did your role in the seminar (inner/outer) impact your feelings about the seminar?</li> <li>What were some effective ways that were used to keep the conversation going?</li> </ul>
	DIFFEREN	ITIATION	
(Describe how the planned learning experienc more of the areas below. On	-		•
Content	Process	Product	Learning Environment

Content	Process	Product	Learning Environment
Above grade level text	Students will participate		Students will work
provided to students.	in Socratic Seminar.		independently, in small
	Students will facilitate the		groups, and in a seminar
	seminar themselves and		during this activity.
	will be responsible for		
	crafting questions which		
	maintain the integrity of		
	the seminar		

#### 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.

Before students enter the classroom, the teacher will provide each of the students with an index card. On each side of the index card is written the following prompt: "How do you feel while watching the videos? What are your thoughts while watching the videos? Write about the impact that watching the videos had on you."

As students enter the room, the lights will be out and there will be videos looping on the active-board. The video depicts footage of Bigfoot being spotted in various locations and footage of the famous Patterson film of Bigfoot.

Once all students have viewed the videos, turn on the lights. Allow students to share orally what they have written on their index cards.

Once students have had the opportunity to share their personal reactions, pose the following questions to the students. Students will respond orally to questions posed. One question will appear on a piece of chart paper. A scribe will be responsible for each chart or question. He/she will record student responses on the chart paper. Whole class will participate in discussion surrounding the questions.

- What was happening in the video you watched?
- How might the events depicted in the videos initially impact how people might think about legends and myths?
- What impact have the videos had on society?
- What is the relationship between myth and reality?
- In what ways do the videos make us think critically about the mystery of Bigfoot?

**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.

Students will be provided with a copy of the article <u>Bigfoot, Sasquatch, Yeti, A Paul Stonehill Article</u>. Each student will be asked to read the article silently. Once all the students have read the article, the teacher will facilitate a "close reading" of the 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.

Students will be divided into groups of three or four. Each group will be expected to have read the article. The group members will discuss their notes and questions they have written during the close reading. Each group should craft five questions as a result of the close reading. Questions should represent questions requiring higher levels of thinking. (These questions along with the notes resulting from the close reading will be used during the Socratic Seminar.)

When groups have completed their task, the teacher will allow for the students to ask questions to each other. The following questions can be used as a catalyst if the group is struggling with the seminar:

• What exactly is a Bigfoot?

- Why haven't there been any bones discovered?
- Why aren't there more clear pictures and videos?
- Do you believe the Patterson film is real?
- Why is most main stream scientist skeptical of their existence?
- Why are so many sightings in the Pacific Northwest?
- Are they considered dangerous?
- Is there any real proof of these creatures?
- How has the mystery of Bigfoot impacted reality in various locations around the world?

Students respond to the questions orally. Multiple responses representing different perspectives are allowed.

**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

Students are divided into two groups. One group will compose the inner circle of the Socratic Seminar; one group will form the outer circle of the Socratic Seminar environment. The inner circle members begin the dialogue while the outer circle members take notes about the dialogue, craft questions they have about the dialogue and observe one participant of the inner circle (their partner for the seminar). The leader, one student designated by the teacher, will begin the Seminar with one provocative question. Inner circle students will respond in a dialogue fashion throughout the seminar. Students will follow expectations for participation which are attached to this plan and have been discussed prior to the seminar.

Opening questions might include: (If the designee does not have an opening question, these could be used. These questions could also be inserted if the dialogue during the seminar falters.)



- What information is unclear, missing, or unavailable?
- What is the significance of Bigfoot in 2017?
- What is the overall tone of the reading?
- How is the reading related to mystery vs reality?
- What evidence do you need?
- What has not yet been proven?

Students will dialogue for 10 minutes and then the inner and outer circles will change places. The new outer circle members will now be taking notes, crafting questions, and observing their partner in the inner circle.

When student have completed the seminar (after 10 minutes with the second circle), the teacher poses the following questions:

- What was one theme or "big idea" you discovered through participation in this seminar?
- What generalizations could you make about the existence of Bigfoot?
- How did the seminar experience help deepen your thoughts on mystery vs reality?
- How was your thinking clarified in the seminar?
- How does the mystery of Bigfoot impact people's reality?
- How does the mystery affect people? Businesses? Movie Makers? Movie Theaters?

- What did I do well during the seminar?
- How did your role in the seminar (inner/outer) impact your feelings about the seminar?
- What were some effective ways that were used to keep the conversation going?

After students have shared responses orally, students are instructed to return to their small groups.

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

Students will work in their original small groups (groups of three or four members who prepared five questions of use in the seminar and participated in silent close reading together.) Students will research, collect, organize and analyze data which will enable them to:

Create a timeline of Bigfoot theories and sightings throughout history

Changes over Time / Connecting Points in Time
How and why do things change about Bigfoot? What doesn't change?

Examining different time periods and how thoughts of Bigfoot change. Compare and Contrast different time periods.

#### And

• Prepare a proposal on whether or not they believe Bigfoot is a mystery or a reality.

This experience will be accomplished through a performance task that will have students prove their thoughts on whether or not the mystery of Bigfoot or another mystery of their choice is real. Observation and notes taken during collaborative work on this performance task will be used to assess individual effort and work. Students will work at this task taking on *different perspectives* and presenting their argument. They will try to prove it!!



**Different Perspectives** 

Name				Lesson #
Wendy McKinney				3
MODEL	CONTEN	IT AREA	GRADE LEVEL	
Problem Based Learning	Science/Language Arts 5th			
CONCEPTUAL LENS LESS			LESSON TOPIC	
Mystery		How can we solve the mystery of the Great		Great
Pyramids and Stonehenge?				
LEADNING ORIECTIVES (from State / local Curriculum)				

# **LEARNING OBJECTIVES** (from State/Local Curriculum)

#### CCSS.ELA-LITERACY.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.

#### CCSS.ELA-LITERACY.RI.5.6

Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.

5.P.1 Understand force, motion and the relationship between them.

THE ESSENTIAL UNDERSTANDING (What is the overarching idea students will understand as a result of this lesson?	THE ESSENTIAL QUESTION (What question will be asked to lead students to "uncover" the Essential Understanding)
Mystery Impacts Reality	How do mysteries impact reality?
CONTENT KNOWLEDGE (What factual information will students learn in this lesson?)	PROCESS SKILLS (What will students be able to do as a result of this lesson?)

- Students will learn about the ancient pyramids of Egypt and Stonehenge in England.
- Students will learn some theories about how and why the pyramids and Stonehenge were created.
- Students will discuss the mystery behind each architectural masterpiece.
- Students will learn about the evolution and uses of the wheel and axle and the lever.
- Students will understand how a wheel can be and described as a lever.
- Students will understand that engineers use the wheel and axle, and lever on a daily basis.

#### Students will be able to.....

- Identify possible reasons why the pyramids and Stonehenge were created.
- Discuss the mysteries behind the story of each architectural marvel.
- Discuss how simple machines may have aided in the building of the pyramids and Stonehenge.
- Identify a wheel and axle and a lever when observed.
- Analyze observational data to create generalizations.
- Develop an engineering design process for a specific need that could solve a mystery.
- Brainstorm and design a transport system.
- Create a prototype to be used in the transport system.
- Students will make revisions based on the resources they have at hand.

#### **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: Post Lesson Questions: Post Lesson Questions:

Have you ever wondered about the mystery of the ancient pyramids or Stonehenge?
What was the most difficult part people had to do to build these huge objects? Could this happen in reality?

How strong would you have to be to move these huge stones?

Does water move objects faster? What are simple machines? How did simple machines help during the ancient pyramid building? Did these machines change the reality of the time period? How are simple machines used in transport systems? What is a lever? What is a wheel and axle? Why do we need simple machines? Does reality impact the mystery of these great architectural designs?

How can the reality of simple machines help to take the mystery out of the building of these architectural marvels? How does a lever work? What is a fulcrum? How does a lever make work easier? What does the word "hoist" mean? What is mechanical advantage? What is a wheel and axle? How can logs be an example of a wheel and axle? What is an example of an wheel and axle combined with a lever system used today to transport rocks? What is the engineering design process? Is there a mystery to design or can it be proven?

How might have ancient engineers built the pyramids and Stonehenge? Why do so many still find these structures a mystery? What tools did they use? Why do engineers use a combination of wheel and axle and levers to transport materials today? How did the reality of simple machines change things? How might you use a wheel and axle or level if you were constructing your own house? Why was the use of simple machines so important? Do you think the mysteries of these great structures are not so much a mystery anymore? Does the reality of machines change your thoughts on the mystery of these places? Do the mysteries of these great marvels impact the countries they are a part of?

#### **DIFFERENTIATION**

How can we create a prototype

that will transport large rocks?

(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
	Students work in		
	teams to solve an		
	open-ended design		
	problem. They are		
	working to find the		
	best solution to a		
	problem.		

#### 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.

As students enter the classroom, they will take a picture walk around the room looking at different pictures of Stonehenge and the pyramids of Egypt. They will then choose one Stonehenge or the pyramids and write an independent paragraph describing the how and why they believe these great architectural giants were built. The paragraph should include:

Who built them?

Why were they built?

How long did it take?

What tools did they use to build them?

What were they used for?

After eight minutes of writing, students are asked to share their thoughts with the class. The teacher will record response so that the list is visible to the class. Using the paragraph style writing should provide opportunity for students to provide elaboration for their responses.

Teacher will then ask pre-lesson questions. Students respond to questions orally as a whole group.

**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.

The teacher introduces a video called "Building Stonehenge: this Man Can Move Anything" at <a href="https://www.youtube.com/watch?v=E5pZ7uR6v8c">https://www.youtube.com/watch?v=E5pZ7uR6v8c</a>

They are to focus on how this man thinks that Stonehenge was able to be built. After the video, students are asked to refer back to their paragraphs and reflect has their thinking changed any. If so how?

Next, students are divided into groups to explore different types of simple machines that people may have used to create the pyramids and Stonehenge. During this time students will be exploring different types of simple machines that may have been used to build the pyramids and Stonehenge. Students will explore different stations that will teach them about how the Egyptian people may have built their structures using these simple machines. They will examine different types of simple machines and take note on how they work. They will also at one station classify illustrations as "wheel and axle" or "lever" using images embedded in the Wheeling It In! Presentation (PowerPoint) This promotes an inquiry based style of learning.

Language of the Discipline



What vocabulary terms are

specific to the content or discipline?

#### Lesson Background and Concepts for Teacher

#### Lever

A lever is a simple machine that provides a mechanical advantage when used. Specifically, it is a bar pivoted on a fixed point (called the fulcrum) that is used to lift an object by applying force to one end. The idea, usually, is that you apply force to one end of a bar, in order to lift the other end.

#### Mechanical Advantage

Simple machines provide an easier way to do work due to a tradeoff between force and distance. This is called mechanical advantage. A lever allows an object to be lifted by exerting minimal downward force.

#### Wheel and Axle

With the popularity of vehicles today, we can see that the wheel and axle are main components in a very effective mode of transportation. Whether transporting people on long road trips, hauling cement or gravel, or moving furniture, cars, dump trucks, moving trucks and buses are successful modes of transportation. In fact, virtually all methods of transportation use the wheel and axle in some way. Although these types of vehicles did not exist in the early days of pyramid building, the wheel and axle, a simple machine, did exist.

Many archeologists believe that Egyptian engineers transported stone blocks long distances by placing logs under the stones, with large numbers of people manually pulling on a rope attached to the front end of the stone, and continually adding new logs under the leading edge of the stone as the block was rolled forward. This transportation method can be thought of as a simple wheel and axle, with the logs serving as rudimentary wheels. This method facilitated the transportation of stone that would otherwise have been much too heavy to move from a rock quarry to a construction site.

#### **Other Transport Methods**

Other stone transportation methods included two- to four-wheeled carts. The stone could have been hoisted onto the cart by the same method that is believed to have been used by the Egyptians.

**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.

After students have completed the assignment in groups with learning about levers and wheel and axles they are to draw conclusions based on their observations. The teacher asks students to report their findings. Each group reports their conclusions and reasons for their conclusions. Students are encouraged to discuss conclusions of other groups and to contribute by questioning and adding their own conclusions.

Post –lesson questions and discussion- answers are discussed and elaborated

Students will learn that to build the Egyptian pyramids, engineers had to develop methods of transporting rock a great distance, perhaps hundreds of kilometers! Often, these stones also had to be transported across rivers. Have a discussion director within groups to ask these questions. Have any of you ever tried crossing a river or creek with a fast-moving water? Maybe some of you have been tubing before? Do you remember anything about the speed at which the water pulled you? Do you think the people who built Stonehenge used the same methods for stone transportation that the Egyptians used?

Each stone was cut with such accuracy, delicacy and artistry, that the pyramids are visited in wonder by millions of people each year! In fact, the Great Pyramids in Egypt, are considered to be one of the seven wonders of the world. Today, we are going to learn about the very clever ways that engineers of those times devised to transport heavy stones to their pyramid and Stonehenge construction sites.

**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

In groups of four, have students brainstorm ideas to define an engineering design problem related to the above lesson (i.e. some sort of transportation problem). What is the need or want of your problem? First, assign one student in the group to be the recorder. Then, have someone toss out an idea. Next, another person in the group provides an idea that builds on the first. Go around the group in this fashion until all students have put in enough ideas to define an engineering design problem. Next, have students define a short list of criteria that the design must meet. For instance, the design must move lift the object 50 feet. Help the students understand what a design criteria is. Lastly, have students come up with a short list of constraints for their problem (e.g.. material constraints such as they only have materials that were available in ancient times; or they only have a budget of one hundred dollars). Help students understand the idea of engineering constraints (materials, time, costs, etc). When they are done, have them try to create a prototype of their design. Encourage the incorporation of any simple machines they have learned about.

#### **Provide for students: Engineering Design Process**

As the students design and build their own version of an ancient transport system, show them to the **engineering design process** — a series of steps that engineering teams use to guide them as they solve problems.

- 6. *Understand the need:* What is the problem? What do I want to do? What are the project requirements? What are the limitations? Who is the customer? What is the goal? Gather information and research what others have done.
- 7. *Brainstorm and design:* Imagine and brainstorm ideas. Be creative. Investigate existing technologies and methods to use. Explore, compare and analyze many possible solutions. Select the most promising idea.
- 8. *Plan:* Draw a diagram of your idea. How will it work? What materials and tools are needed? How will you test it to make sure it works?

- 9. *Create:* Assign team tasks. Build a prototype. Does it work? Talk about what works, what doesn't and what could work better.
- 10. *Improve:* Talk about how you could improve your end product. Make revisions. Draw new designs. Make your product the best it can be.

Engineers explore all possible options and compare many design ideas. This is called open-ended design because when you start to solve a problem, you don't know what the best solution will be. Engineers use prototypes, or early versions of the design to improve their understanding of the problem, identify missing requirements, evaluate design objectives and product features, and get feedback from others. Engineers select the solution that best uses the available resources and best meets the project's requirements.

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

Assign the students to write a short entry in their "ancient time capsule journal" that describes the relevance of the wheel and axle, and the lever in the building of pyramids, and also examines how the mystery of the building of these great structures impacted the reality around them. Also address the some of the following issues:

- How might Egyptian engineers have used the wheel and axle?
- How might Egyptian have used the lever to speed up the process of building? Why would speed be important for the Egyptians?
- Why was the use of these simple machines so important? What impact did they have on reality?
- Draw and label the parts of a wheel and axle and a lever. Tell how the wheel and axle a d lever impacted the building of the great structures. What would have happened with no wheel and axle and no lever? How would things have been different? Why?
- List five items with which you are familiar that use either a wheel and axle, or a lever.
- Describe the steps of the engineering design process. Describe how the process enables structures to be built in a timely manner and why that is important.

TEACHER NAME				
McKinney				
MODEL	CONTENT AREA		GRADE LEVEL	
Kohlberg and Moral	ELA		5 <sup>th</sup> Grade	
Development				
CONCEPTUAL LENS		LESSON TOPIC		
Mystery		How the mystery of the unknown affects the		
		decision making process.		

#### **LEARNING OBJECTIVES** (from State/Local Curriculum)

#### CCSS.ELA-LITERACY.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.

#### CCSS.ELA-LITERACY.RI.5.6

Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.

#### CCSS.ELA-LITERACY.RI.5.9

Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.

THE ESSENTIAL UNDERSTANDING (What is the overarching idea students will understand as a result of this lesson?	THE ESSENTIAL QUESTION (What question will be asked to lead students to "uncover" the Essential Understanding)
Mystery Impacts Reality	How do mysteries impact reality?
CONTENT KNOWLEDGE (What factual information will students learn in this lesson?)	PROCESS SKILLS (What will students be able to do as a result of this lesson?)

- Students will know that moral development focuses on the emergence, change, and understanding of morality from infancy through adulthood.(Kohlberg)
- Students will know that most great mysteries of the world impact the reality around them. They will learn that mysteries help to drive people's decision making process every day.
- Students will know that characters' moral development may impact their feelings on situations which in turn impacts their decision making
- Students will know that a dilemma is a problem for which the solution can be complex; that the problem and solution may have moral and/or ethical implications.

#### Students will be able to .......

- Analyze the moral development of a character.
- Compare and contrast stages in moral development.
- Analyze characters' responses to issues and actions
  - Create persuasive writings
  - Create inferences from text; support inferences by citing textual evidence
  - Prioritize values and/or moral decisions

#### **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: Post Lesson Questions:

What is a dilemma?

What is an example of a dilemma?

- What makes dilemma's difficult?
- How might you go about solving a dilemma?
- What are morals?
- How do you think morals relate to a dilemma?
- What factors inform morals?
- When do/should people use their morals?
- How would you define moral development?
- How can an unsolved mystery impact a moral dilemma? For example think about the moral dilemmas that were faced when building the pyramids? Who was going to build them and did their lives matter?

Who will be impacted by the decision the captain makes? What are your reasons for saying that? Anyone else?

- How will these characters be impacted? What are your reasons for saying that?
- How might the preacher feel about this situation? What are your reasons for saying that?
- How might the first mate feel?
   What are your reasons for saying that? How might the scientist feel about making a decision? Why?
  - How does the mystery of the Bermuda Triangle impact the reality that all these people are expressing?
- How might you use these stages to reflect on how you have solved a dilemma in the past?
- How might you use these stages in the future when you may need to make a decision about a dilemma?
- How might you use these stages to make inferences about characters and the decisions they make?
- What will you learn about the character's decision?

How can you use these stages to reflect on how you have solved a dilemma in the past?

- How might you use these stages in the future when you may need to make a decision about a dilemma?
- How can you use these stages to make inferences about characters and the decisions they make?
- What will you learn about the character's decision?
- In what ways were the dilemma faced by each protagonist similar? In what ways were they different?
- How do you think each protagonist felt about the dilemma?
- What reasoning do you think each protagonist will use to resolve the dilemma?
- Why do you think the protagonist will use the reasoning they choose? What evidence can you cite to support your choice of reasoning?
- Which protagonist, in your opinion, used the strongest reasoning for her solution to the dilemma?
  - How was reality impacted in both dilemmas by mystery?

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
Articles on major	Kohlberg's Stages of		
theories around the	Moral		
Bermuda Triangle and	Development requires		
video.	students to engage in		
	high		
	level process skills.		

#### 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.

As students enter the room, the teacher has displayed (so that everyone can see) a picture of a man - A cartoon of a child being left out of a group. The child is being bullied what would you do?



Students are instructed to view the picture.

Debrief: Teacher asks: What do you see in the picture?

What else do you see in the picture? What is going on in the picture? What might the boy be thinking? What is on his mind?

Students will have the opportunity to respond to the questions and to share their thoughts. (Answers should include something about trying to make a decision

The teacher asks pre-lesson questions:

What is a dilemma?

What is an example of a dilemma?

A circumstance that might cause a dilemma?

What are morals?

How do you think morals and dilemmas could be related?

What factors inform morals?

When might people use morals to solve a dilemma?

How can mysteries like we have studied this week impact how we solve a dilemma?

**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.

The teacher redefines "dilemma" as relevant and provocative situations, which exist in everyday life as well as in literature. Dilemmas cause us to think critically and reflectively about difficult decisions, which must be made.

#### For Example:

1. The teacher provides students with "The Captain's Dilemma" Students are instructed to read "The Captain's Dilemma" silently. Once all students have read the short narrative, they are

asked to summarize the events in the narrative. They should include principle characters, and describe the alternatives open to the protagonist. Several students are asked to share their responses. (Sharing should only take enough time for facts to be presented and the dilemma to be identified.)

2. The teacher asks students to individually choose a position for themselves and jot down one or two reasons for their decision. The teacher asks for a students to group themselves by decision (he should go through the Bermuda Triangle, or he should go through the hurricane). Within the large groups, students should divide themselves into smaller groups of three or four. Students record reasons for making their choices. Small groups report their reasons for their choice to the class after 5 minutes of discussion.

**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.

3. The teacher brings the class together for a whole class discussion. The teacher asks the following questions:

Who will be impacted by the decision the captain makes? Why are your reasons for saying that? How will these characters be impacted? Why are your reasons for saying that? How might the passengers feel about the captain's choice? Why are your reasons for saying that?

How might the captain feel as a result of his choice? Why are your reasons for saying that? How did the mystery impact the captain's reality?

4. The teacher asks students individually to write (on post it notes) their choice for the captain's decision and their two strongest reasons for this choice. Upon completion, students place post it notes on the appropriate chart paper.

The teacher brings the class back for whole group instruction. The teacher present information about Kohlberg's Stages of Moral Development. The teacher tells students that these are stages that progress from infancy to adulthood. The stages simply provide an idea about how humans develop their reasoning as they mature.

The teacher provides students with a handout of Kohlberg's Stages of Moral Development. The stages are briefly discussed, in terms appropriate for the grade level.

Stage One-Avoiding Punishment

Stage Two-Getting a Reward or Benefit

Stage Three-Winning Approval (What others will think of me)

Stage Four-It is the Rule or the Law

Stage Five-It is in line with Social Order; This is the difference between moral and legal; Social Justice

Stage Six-(theory) Universal Principles (Ethics)

The teacher asks: How could you use these stages to reflect on how you have solved a dilemma in the past? What do you learn about your reasoning How might you use these stages in the future when you may need to make a decision about a dilemma? How can you use these stages to make inferences about characters and the decisions they make? What will you learn about the character's decision-making and reasoning?

**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

The teacher will ask the students to group themselves in groups of three or four. (Members of each group should be reading the same text.) The teacher will provide the students with the following assignment:

You are to use your assigned reading to analyze the dilemma the protagonist faced. (Some students will read *Carroll A. Deering - The Ghost Ship* and others will read *The Flight*)

The teacher instructs: Read the assigned "article" for pleasure and content once; then go back and read the "article" with an analytical "eye". The following tasks should guide your analysis.

Work independently until you have completed your independent tasks. When all members of your group have completed the independent tasks, you should meet with your group to discuss your choices and come to consensus about how the protagonist should have managed the dilemma. Be prepared to share your ideas with other groups who have read the same text you have read.

Tasks for independent thinking and group discussion:

- Summarize the events in the reading. You should identify the dilemma faced by the protagonist. You should include principle characters, and describe the alternatives open to the protagonist.
- Why do you think the protagonist took the position and jot down two or three reasons for her decision?

After small groups have shared their thoughts on the two tasks above, the same small groups will answer and discuss the following three questions.

Questions for group discussion:

- Who will be impacted by the decision the protagonist makes? Why are your reasons for saying that?
- How will others characters be impacted by the decision that is made? Why are your reasons for saying that?
- How might the protagonist feel as a result of her choice? Why are your reasons for saying that?
- How is this dilemma related to mystery and reality?

The teacher monitors groups by circulating during small group discussions. When all groups have completed discussions, the teacher reconvenes the whole group. The teacher calls for a volunteer from each group to summarize the dilemma each protagonist faced for the whole group.

The teacher asks:

- In what ways were the dilemma faced by each protagonist similar? In what ways were they different?
- How do you think each protagonist felt about the dilemma?
- What reasoning do you think each protagonist will use to resolve the dilemma?
- Why do you think the protagonist will use the reasoning they choose? What evidence can you cite to support your choice of reasoning?
- Which protagonist, in your opinion, used the strongest reasoning for her solution to the dilemma? Defend your answer.

The teacher facilitates discussion resulting from the questions above. Students should have the opportunity to have a rich discussion around these questions.

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

The teacher asks students to work independently to reflect on the following questions.

- How can a sense of mystery impact decision-making?
- How can moral development impact decision-making?
- What is the relationship between a sense of mystery and moral development? Once students have reflected on these questions, they are to represent their thoughts. They may either:

Create some type of graphic which indicates the relationship of the concepts, mystery, decision-making, and moral development

OR

Create a piece of writing (poem, rap, song, essay) which indicates the relationship of the concepts, mystery, decision-making, and moral development. Students will share their finished products with the class.

Products will be assessed with a rubric.

#### THE DILEMMA

The Captain's Dilemma

The Dilemma: A captain of a cruise ship is faced with an unthinkable situation. He must decide whether or not to take his ship with 3,000 passengers through the Bermuda Triangle or face the hurricane that is forming in the mid-Atlantic. The captain knows that many ships and planes have gone missing in the area called the Bermuda Triangle. Taking the risk to go through what also been called the "The Devil's Triangle" could mean death but staying on course would lead to unimaginable rough seas and maybe death for all on board. The captain is going to seek the advice from three people on board. He will ask his first mate John Cutler who has sailed these seas for more than 20 years what he thinks he should do? The captain will also ask Richard Bucke a preacher that is on board and has lived in Bermuda his entire life and a scientist Lindsey Gage who is on the ship conducting some weather experiments for the National Oceanic and Atmospheric Administration (NOAA). What advice from these three people will help lead the

captain to his ultimate decision? Will one person have strong enough evidence to persuade him to make the decision they deem the safest? What will the outcome be for all on board?

## **Unit Resources**

### **Books**

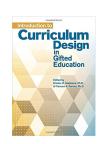


Carlile, V. D. (2009). Enigmas. Hawthorne, NJ: Education Impressions, Inc. Used this book to find information for students on various enigmas. (Stonehenge, The Pyramids, Loch Ness Monster, and the Bermuda Traiange)

Cohen, D., & Dennis, P. (1995). The riddle of the stones. New York: Kingfisher. Read aloud used during the lesson on Stonehenge and Bermuda Triangle.

Doyle, O. (2012). Strange mysteries of the unexplained. New York: Scholastic. Students used this book for research during the unit.

Stephens, K. R., & Karnes, F. A. (2016). Introduction to curriculum design in gifted education. Waco, TX: Prufrock Press Inc. – Used this text to help create lesson that took into account a responsive approach to gifted students learning. (Connected, Creative, Capable, Conscientious leaders, Curious)



THE RIDDLE OF

### Websites and Videos

# The Loch Ness Monster

<u>Top 5 Loch Ness Monster Video</u> - HOOK at the beginning of the lesson to intrigue the students

Naked Science – Students used for research



Recent News Articles about a lake monster in Lake Norman a lake in NC

http://www.charlotteobserver.com/news/local/article161104623.html

http://www.charlottestories.com/creature-resembling-loch-ness-monster-spotted-lake-norman/

## Loch Ness monster spotted? Tourists' photo sparks debate June 2017

<u>The Legend of the Water Horse</u> Movie Trailer – Used to show how mystery impacts reality / movies are made based on mysteries



# **BIGFOOT**

<u>Patterson Gimlin Bigfoot Film- Bill Munns Analysis</u> Used to show students most seen recorded video of Bigfoot

<u>The Evidence For Bigfoot Article Animal Planet</u> - Students used for research

<u>Patterson/Gimlin Bigfoot Film - Complete Version</u> – Longer version of Paterson film

<u>Bigfoot caught on tape (Patterson footage stabilized)</u> — Used to analyze footage

Bigfoot, Sasquatch, Yeti – Article used for Socratic Seminar

IF Bigfoot Were Real – Students used for research

Bigfoot: Man-Monster or Myth – Students used for research

7 Most Believable Videos – HOOK at the beginning of the lesson to intrigue the students

Articles Relating Bigfoot to Reality Today
Abominable Snowman believers will find this unbearable
<a href="https://drive.google.com/a/rock.k12.nc.us/file/d/0B7a21sjOEIoGSHEwZERyS1FoYkE/view?usp=sharing">https://drive.google.com/a/rock.k12.nc.us/file/d/0B7a21sjOEIoGSHEwZERyS1FoYkE/view?usp=sharing</a>

### Watching for bigfoot

https://drive.google.com/a/rock.k12.nc.us/file/d/0B7a21sjOEIoGeUd3TkJnOFpiQXM/view?usp=sharing

# **Pyramids**

Egyptian Pyramids Webquest with links to be used for information and research

https://drive.google.com/file/d/0B7a21sjOEIoGSkwyelR4eGRtWkk/view?usp=sharing

## Articles used for research by students

Drop in tourism endangers restoration of fabled monuments in Egypt <a href="https://drive.google.com/file/d/0B7a21sjOEIoGR0MxVVQ1ejRzU1k/view?">https://drive.google.com/file/d/0B7a21sjOEIoGR0MxVVQ1ejRzU1k/view?</a> usp=sharing

Ancient Middle East: Will This Pyramid Draw Crowds?

https://drive.google.com/a/rock.k12.nc.us/file/d/0B7a21sjOEIoGZTlmQnFYZHhJcUE/view?usp=sharing

In the Shadow of Pyramids

https://drive.google.com/a/rock.k12.nc.us/file/d/0B7a21sjOEIoGbkllM1pXZmdyTkk/view?usp=sharing

# Stonehenge



Stonehenge Webquest – Used for student research <a href="https://drive.google.com/file/d/0B7a21sjOEIoGNGhiNVctUS1LVHM/view">https://drive.google.com/file/d/0B7a21sjOEIoGNGhiNVctUS1LVHM/view</a>?usp=sharing

Old Houses Open Doors to the Past – Article used for research <a href="https://drive.google.com/file/d/0B7a21sjOEIoGSVVaSWQ0bHBweWM/view?usp=sharing">https://drive.google.com/file/d/0B7a21sjOEIoGSVVaSWQ0bHBweWM/view?usp=sharing</a>

# Bermuda Triangle

Bermuda Triangle <u>TOP 5 Video</u> – HOOK at the beginning of the lesson to intrigue the students

## Articles used for research by students

The mystery of the Bermuda Triangle

https://drive.google.com/file/d/0B7a21sjOEIoGdkFxdlctcVY1LUk/view?usp=sharing

LIVESCIENCE ARTICLE /Bermuda Triangle: Where Facts Disappear https://www.livescience.com/23435-bermuda-triangle.html

New York Times Article / Bermuda Triangle Demystified?

http://www.nytimes.com/fodors/top/features/travel/destinations/bermudaand caribbean/bermuda/fdrs\_feat\_29\_8.html?n=Top%2FFeatures%2FTravel%2 FDestinations%2FBermuda+and+Caribbean%2FBermuda