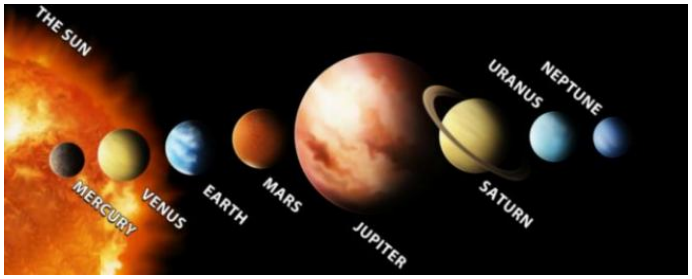
==========



A Lesson on Learning about the Solar System
by Ciara Ledford

Grade Level: Grade 4
Subject Area: English Language Arts
Lesson Length: 1 hour
Lesson Keywords: Planets, Sun
Lesson Description: This lesson is to inform the students a little more on the solar system and what scientists do to acquire their information. Hopefully they will take an interest to this story and stay focused. My goal is to make sure the students read each question carefully and go back into the text to discover the answers and come out on top when the test is over.

Common Core Standards Covered with This Lesson
CCSS.ELA-Literacy.RL.4.1: Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
==========
CCSS.ELA-Literacy.RL.4.7: Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.
==========
CCSS.ELA-Literacy.RI.4.5: Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
==========
CCSS.ELA-Literacy.RF.4.3: Know and apply grade-level phonics and word analysis skills in decoding words.
==========
CCSS.ELA-Literacy.RF.4.4c: Use context to confirm or self-correct word recognition and understanding, rereading as necessary.
==========
CCSS.ELA-Literacy.W.4.1c: Link opinion and reasons using words and phrases (e.g., for instance, in order to, in addition).
==========
CCSS.ELA-Literacy.L.4.3a: Choose words and phrases to convey ideas precisely.
==========
CCSS.ELA-Literacy.L.4.4a: Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase.
==========

==========

Lesson Content: Book/Story/Reading Passage

Instructions: Please read the following reading passage as many times as needed (aloud and silent) before starting to go through other lesson pages. Understanding the content of this passage is very important since the lesson activities will be all about this content. Feel free to print the passage if needed.

Learning about the Solar System

by

Content: When scientists looked at the stars long ago, they saw patterns. They did not?understand everything about what they saw. So they kept looking to learn more.?That is what scientists do. They ask questions and look for information to answer?their questions. They are like explorers. They do not travel far the way explorers?do. But they do make a kind of journey. They want to learn more. They go from?what they know to what they discover.?

Scientists have learned about our planet. It is very big. It is very diverse.?There are places that are hot. There are places that are freezing. There are?mountains and plains. There are hills and valleys. There are deep oceans. There?are great rivers and waterfalls. There are rainforests. There are deserts. Those?are all parts of our planet. There is much more to learn about what is here on?Earth. A scientist dedicates much time to learning. The scientist works hard. The?scientist helps us all find out more about our world.?

Our planet is in a galaxy called the Milky Way. The sun is a big star in our?part of this giant galaxy. Our galaxy holds millions of other stars. The sun is very?important to our planet. The sun gives us light during the day. It gives us heat,?too. Two other planets are closer to the sun than Earth: Mercury and Venus.?

Scientists figured out how the Earth changes. Earth orbits the sun once each?year. It travels once around the sun every 365 days. The other eight planets in our?solar system also orbit around the sun. All travel in a pattern called an ellipse,?which is a kind of oval. So at times Earth is farther from the sun. Scientists?figured out that made it cooler on Earth then. But they also figured out that it is?the tilt of the Earths axis, however, that has the greatest effect on temperatures.?

Scientists are still learning about our galaxy. There is much to discover. Today?astronauts travel into space. They are explorers. It is dangerous to travel in space,?but they are dauntless. They bravely travel thousands of miles to learn.?

==========

==========

Task 1: Vocabulary

Instructions: Please complete the following vocabulary activity by choosing the correct meaning of each word selected from the passage and use of each word correctly in a sentence.

Q: 1 **WordPhrase**: Explorer **WordPhraseTier**: 3
Question: How are scientists like explorers in this story?
A: Explorers like to travel.
B: They wait for someone else to answer the questions for them.
C: They like to investigates unknown regions even though they cannot go there.
D: They are not interested in learning.

Question: "They are like explorers. They do not travel far the way explorers do. But they do make a kind of journey." How does this journey make Scientists like explorers?
A: Scientists are wanting to learn about the galaxy far away.
B: Scientists do not go anywhere.
C: Scientists make other people travel for them.
D: Scientists travel to the galaxies they study.
==========

Q: 2 **WordPhrase**: Discover **WordPhraseTier**: 2
Question: How would you determine the meaning 'discover' in this story?
A: Scientists are traveling like explorers.
B: Scientists use what they know to learn.
C: Scientists know there is more information and want to learn more.
D: Scientists do not need to learn more.

Question: "Scientists are still learning about our galaxy. There is much to discover." Which answer best describes 'discover' in this story?
A: Scientists are wanting to finish up their discovery.
B: Scientists do not go anywhere.
C: Scientists make other people travel for them.
D: Scientists still a lot of information to learn.
==========

Q: 3 **WordPhrase**: Dauntless. **WordPhraseTier**: 3
Question: "It is dangerous to travel in space, but they are dauntless." Which word best describes 'dauntless'?
A: Brave
B: Scared
C: Hopeful
D: Sad

Question: What makes astronauts dauntless?
A: Astronauts are not dauntless.
B: They travel thousands of miles into space just to learn.
C: They are too scared to travel.
D: Astronauts listen to what scientists tell them to do.
==========

Q: 4 **WordPhrase**: Orbit **WordPhraseTier**: 2
Question: "Earth orbits the sun once each year. It travels once around the sun every 365 days." What best describes 'orbits'?
A: Earth goes around the sun.
B: Earth stays still in space.
C: The Earth does not move.
D: The Sun travels around Earth.

Question: What happens when the earth orbits away sun?
A: The temperature gets hotter.
B: The temperature gets colder.
C: The temperature stays the same.
D: The sun does not orbit away from the sun.
==========

==========

Task 2: Forum Discussion

Instructions: This discussion forum will have questions for each student to respond. Read the questions and respond to each. Each answer is atleast one full paragraph.

1 - How is Earth cooler away from the sun?

So at times Earth is farther from the sun. Scientists figured out that made it cooler on Earth then. Can you explain why and how?the sun has an effect on Earth's temperatures?

2 - How do scientists make a journey?

They do not travel far the way explorers do. But they do make a kind of journey. If scientists do not travel anywhere, how do they make a journey?

3 - What else can scientists learn about planet Earth?

In the second paragraph of the story it says, Scientists have learned about our planet. In the last paragraph the story says, Scientists are still learning about our galaxy. If scientists are still learning about the galaxy we live in and other planets in it, do you think they know everything about our planet? What else could they learn about out planet Earth?

==========

==========

Task 3: Writing Activity

Instructions: Write atlest two whole paragraphs supporting your answer.

?

If you were a sciensist or astronaut what would you want to learn more about the Milky Way or the planets inside of it (including the planet Earth we live on)?

==========