Teaching News Is Elementary January 22, 2016

Each week, this lesson will share some classroom activity ideas that use the newspaper or other NIE resources. You are encouraged to modify this lesson to fit the needs of your students. For example, some classrooms may be able to use this as a worksheet and others might need to ask and answer the questions in a class discussion.

Materials you will need for this lesson: The Seattle Times e-Edition, colored pencils, pencil and paper.

Article: "Astronomers say a giant, hidden planet may exist"

Pages: Main News, A11

Date: Thursday, January 21, 2016

Pre- Reading Discussion Questions:

Read the title of this article. What is an astronomer? Why do you think an astronomer would say a planet "may exist"? How could a planet be hidden, especially a giant one?

Vocabulary:

Read the following quotes and determine the meaning of the word based on how it's used in the sentence:

"This one is 5,000 times bigger than **outcast** Pluto and billions of miles farther away, say scientists who presented "good evidence" for a long-**hypothesized** Planet X on Wednesday."

outcast: someone who is not accepted by other people

hypothesized: to suggest (an idea or theory)

"Brown and Batygin believe it's big – 10 times more **massive** than Earth – and unlike Pluto, **dominates** its **cosmic** neighborhood."

massive: very large and heavy

dominates: to be the largest or most noticeable object in (a place)

cosmic: of or relating to the universe or outer space

Journal Writing Prompts:

"We could have stayed quiet and quietly spent the next five years searching the skies ourselves and hoping to find it. But I would rather somebody find it sooner than me find it later," astronomer Mike Brown said in an interview.

"I want to see it. I want to see what it looks like. I want to understand where it is, and I think this will help."

Imagine that you are an astronomer studying the universe and looking for proof of Planet 9 and you finally discover it! Write a story or a news article about your amazing discovery. How did you finally discover it? What does Planet 9 look like? Does it have any life on it? What other planets or objects are near or around it? What did you name your newly discovered planet and why?

Discussion Questions:

Review the excerpts and discuss the following questions:

"This kind of thing comes around every few years. To date, none of those predicts have been borne out of discoveries." Stern said in an email Wednesday. "I'd be very happy if the Brown-Batygin were the exception to the rule, but we'll have to wait and see. Prediction is not discovery."

What does it mean to make a prediction about something? What clues and observations are scientists Brown and Batygin using to make their prediction about the mysterious Planet 9? Do you think their hypothesis is a good one based on the research they have done – why or why not? How is a discovery different than a prediction? Why do you think the discovery of a new planet would be important?

Small group discussion and activity:

"The gas giant is thought to be almost as big as its nearest planetary neighbor, Neptune, quite possibly with rings and moons. It's so distant that it would take 10,000 to 20,000 Earth years to circle the sun."

How long does it take the Earth to circle (orbit) the sun? What are the names of the eight planets in our solar system (Pluto is now considered a dwarf planet and would be number nine if counted)? Which planet in our solar system is closest to the sun and which is the farthest? Which planet do you think is Earth's closest planetary neighbor? Using colored pencils or crayons, draw a picture of our solar system and its eight planets – try to think about the size of the planets in relationship to one another and the sun.