STATION #1 - The Weight of Water

Write the title above in your notebook.

Watch the video clip, "Moonwalk".

*After watching the video, answer the question below in a complete sentences in your notebook:

1. Why did the makers of the video call it "Moonwalk"?

*In your notebook, write a prediction:

Will carrying a gallon jug of water in each hand for 5 minutes be easy or difficult? Why?

Now try it! Pick up a gallon jug in each hand, and walk back and forth in the designated area for 5 minutes. (use the classroom clock to time yourselves)

*Answer in complete sentences in your notebook:

2. What was easy about this activity? What was hard?

Many people in the world have to carry heavier amounts of water than this, for even longer distances.

*Write a paragraph about why their journey is even more difficult than the classroom activity of carrying water. Consider the questions below when you are writing your paragraph.

Consider: What do many of them wear on their feet? How good is their nutrition if they are poor? How does this affect their carrying? What would happen if they were sick or otherwise unable to fetch water on a particular day? Who in their family would suffer?

Station #2 – California Water Crisis

Write the title above in your notebook.

Read the questions below so you know what to look for and then read the article.

Answer the questions in complete sentences in your notebook. If you need more information, use a computer to research answers that were not clear from the article.

Questions to Answer

- 1. Briefly describe the water restrictions that were given.
- 2. How does California's water crisis affect the rest of the country?
- 3. What are some things we could start to do to improve our use of water?
- 4. Name some countries that are experiencing water shortages.
- 5. How is global warming affecting our water supply?
- 6. What is an aquifer? How is the water supply dependent on aquifers?
- 7. How do pesticides affect aquifers?
- 8. What is fracking and how does it affect aquifers?
- 9. What is a "megadrought" and how could it be driven by human activities?
- 10. In a paragraph, describe some solutions for providing enough water for everyone.

Station #3 – Provide Access to Clean Water

Write the title above in your notebook.

Read the article called "Provide access to clean water".

Answer the questions below in your notebook in complete sentences. Be sure to be clear in your answers and explain your thoughts.

- 1. What are some challenges in finding clean water?
- 2. In addition to water for drinking and personal use, how else is water used by society?
- 3. How much of the world's water is salt water? How much is fresh?
- 4. Where is most of the world's fresh water located?
- 5. How do engineers help to meet our water supply demand?
- 6. What is desalination? Why isn't it used more?

In a paragraph, describe how this article changes your view of water around the world.

Station #4 – The Weight of Water

Write the title above in your notebook.

- 1. Read the article called Women Bear the Weight of Water.
- 2. Pretend that you are a child in a developing country. Write a story about the challenges you face in finding water for your family. Write in the first person, using words like "I, me, myself" to describe the experiences you would have in obtaining water.

Include in your story at least six facts from the story. I am not worried about how long your story is (AKA: how many paragraphs), I am worried about the use of facts and how your story flows as an actual story.

Underline where you integrated facts in your story or highlight the facts with a highlighter. This should be an actual story and not just a paragraph of facts mushed together. You may wish to do an outline beforehand.

<u>Station #5 – Groundwater Terms</u>

- 1. Divide out two pages in your notebook into two sections each.
- Label the sections as shown.

Section 1 – Groundwater and Infiltration

Section 2 – Aquifer and Wells

Section 3 – Snowpack and Surface Runoff

Section 4 – Permeable Rock and Impermeable Rock

 Write a definition in your own words for each term then draw and color an illustration to make the meaning clear.

Station #6 – The Watershed

Write the title above in your notebook.

Read the article called "What is a Watershed?"

Now you are going to create a model watershed.



- 1. Take 1 piece of paper, crumple the paper so there are high and low regions and place the paper in the plastic tub. See picture above for a visual.
- 2. Use the dropper to make it "rain" above the highest point of your landform.
- 3. Record observations in your notebook about what happened and where the water went.
- 4. Clean up the station (throw landform in trash, dump the water in the bucket in the sink, etc..)

Write a paragraph describing how this watershed activity compares to a real life watershed. How is this similar? How is it different?

In your notebook, answer the following questions in complete sentences:

- 1. Where you surprised where the water went in your watershed? Why or why not?
- 2. Using the article as reference, what is the definition of a watershed?
- 3. What are some factors in the land that cause a watershed to form differently?
- 4. How do humans use watersheds?
- 5. How could humans harm the watershed they live in or a watershed they visit?

Station #7 – Mexico City Keeps Sinking

Write the title above in your notebook.

Read the article called "Mexico City Keeps Sinking".

Answer the questions below in your notebook in complete sentences. Be sure to be clear in your answers and explain your thoughts.

- 1. Why is Mexico City sinking? Be specific and go through the timeline that had to happen for it to start sinking.
- 2. Could Phoenix go through this process as well? Why or why not?
- 3. Do you think the new government will solve this issue? Why?
- 4. What would your solution be for this situation?
- 5. What was the author's point of view in this article? How do you know?

In a paragraph, describe how the water crisis in Mexico City affected two specific individuals in the city.

<u>Station #8 – Navajo Water Crisis</u>

Write the title above in your notebook.

Read the article called "Navajo Water Crisis".

Answer the questions below in your notebook in complete sentences. Be sure to be clear in your answers and explain your thoughts.

- 1. Why do you think that nearly 40% of the Navajo community does not have running water?
- 2. Why would a well be helpful for the community? Be specific.
- 3. In the article, it talks about using only seven gallons of water a day. Think about all the water you use in a day and make a list of how many gallons you use and for what during a typical day.
- 4. The Navajo Nation is over 27,000 square miles. How many wells do you think would be needed to allow water for all of the rural areas? Why that number?
- 5. What was the author's point of view in this article? How do you know?

In a paragraph, describe what your life would be like if you were in this situation.