Matter Mysteries

Name: _____Group:____

Predictions:

"Consider a very large old tree (ie. Cotton wood or Elm). Where did most of its matter come from."
Hint: wood still has mass even when it's dry.

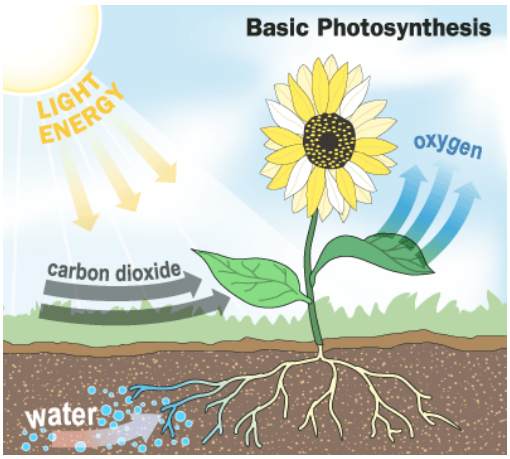
When you lose 15 lbs. In what form does *most* of the mass leave your body? Be specific and discuss how it happens.

Exploration:

1. Write down all the things that you know plants/trees need to be able to grow.

2. Do your best to recall what plants take in and what plants give off.

3. Photosynthesis can be explained on a very basic level. Using the diagram describe what goes in and what goes out.



4. If you did not already, write out the atoms that make up carbon dioxide.

5. When you look at your descriptions from 3 and 4, what does that leave in the plant that wasn't given off?

6. Atoms have mass, the periodic table shows us what each type of atom weighs. For example Carbon is 12 grams per mole. Does energy have mass? Can you "weigh" it? Provide an example.

When you lose 15 lbs. In what form does *most* of the mass leave your body? Be specific and discuss how it happens.

1. Write down what goes into humans and what comes out. You don't need to name specific types of food.

2. What gas(es) do humans take in and what do they breath out?

3. Very generally, write down what humans and other mammals take in and what they put out.

4. When you look at your answer to number 2, what do humans breath out that they did not breath in?

5. Where did the substance in 4. come from?

Final Answers (wait for class discussion to complete):

1. "Consider a very large old tree (ie. Cotton wood or Elm). Where did most of its matter come from."
Hint: wood still has mass even when it's dry.

2. When you lose 15 lbs. In what form does *most* of the mass leave your body? Be specific and discuss how it happens.