

Pre-Assessment for
How Stuff Is Put Together

1. How many hydrogen atoms and oxygen atoms are there in one molecule of water? _____

2. How many electrons does an atom of hydrogen have in its outer shell?

3. How many electrons does an atom of oxygen have in its outer shell?

4. In the chemical reaction that creates water, what are the reactants?

5. In the chemical reaction that creates water, what is the product?

Post-Assessment for
How Stuff Is Put Together

1. How many hydrogen atoms and oxygen atoms are there in one molecule of water? _____

2. How many electrons does an atom of hydrogen have in its outer shell?

3. How many electrons does an atom of oxygen have in its outer shell?

4. In the chemical reaction that creates water, what are the reactants?

5. In the chemical reaction that creates water, what is the product?

Pre-Post Assessment for *How Stuff Is Put Together*
Answer Key

1. 2 hydrogen and 1 oxygen
2. 1
3. 6
4. Hydrogen and oxygen
5. Water, H₂O

Directions for Experiment

1. Fill the beaker 2/3 full with salt water.
2. Place the cardboard over the beaker and insert the 2 pencils through the cardboard and 1 inch into the water.
3. Attach the batteries in parallel (all negatives together and all positives together) and use tape to fix one end of each wire to one end of each pencil.
4. Observe bubbles collecting around the points of the pencils in the salt water. (Note: Oxygen will attract to the pencil hooked up to the positive terminal. Hydrogen will attract to the pencil hooked up to the negative terminal.)

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