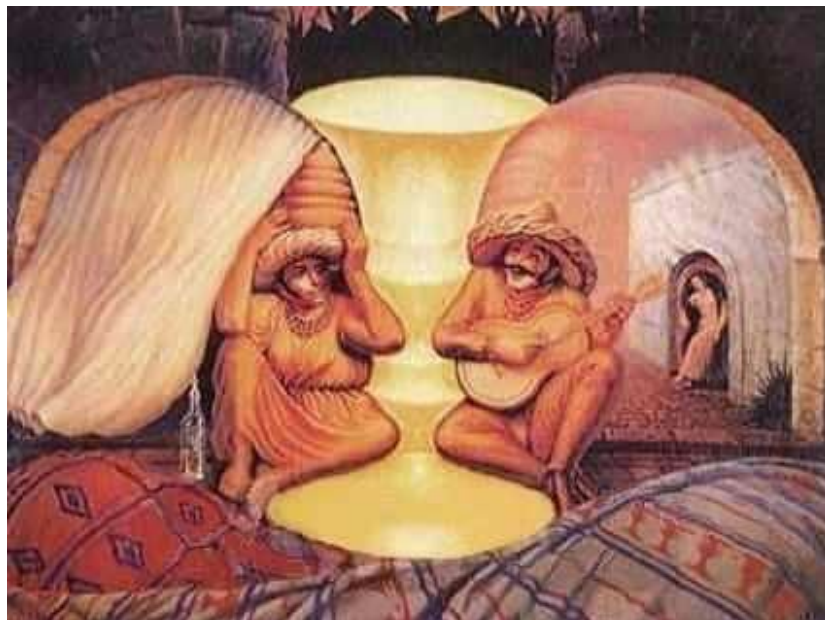


←Image 1

←Image 2



←Image 3



Name: _____ Date: 9/3/13 Period: _____ ASSIGN

Using the Scientific Method

Observations vs. Inferences:

Directions: Examine the photographs at your lab station. Record 2 qualitative observations, 2 quantitative observations, and 2 inferences about the photographs in the table below.

Image 1	Image 2	Image 3
Qualitative Observations: 1. 2.	Qualitative Observations: 1. 2.	Qualitative Observations: 1. 2.
Quantitative Observations: 1. 2.	Quantitative Observations: 1. 2.	Quantitative Observations: 1. 2.
Inferences: 1. 2.	Inferences: 1. 2.	Inferences: 1. 2.

Experimental Design: Old Wives' Tales

People sometimes give us advice for better health or well-being. Some of these "helpful hints" are true. Some aren't. People have realized for a long time that some of these hints aren't true and call them "Old Wives' Tales." An old wives' tale is an everyday statement that some people believe is true, but it usually isn't. So how can you tell good advice from an old wives' tale? You can't just ask a grownup, as sometimes they are wrong. The only way anyone can know the truth for sure is to use the Scientific Method.

Directions: Read the example below and answer the questions about the example. Then, choose one Old Wives' Tale that you would like to do an experiment on, and design your own experiment for it.

Example: Eating carrots improves your vision.

My experiment:

1. Question: Does eating more carrots improve your vision?
2. Hypothesis: If you eat more carrots, then your vision will improve.
3. Experiment: Pick 300 people at random to test. Give them a vision test at the beginning of the experiment.

6. What was the independent variable in the experiment? _____
7. Where is the independent variable on the graph? _____
8. What was the dependent variable in the experiment? _____
9. Where is the dependent variable on the graph? _____
10. What was the controlled variable in the experiment? _____
11. What are some possible problems with your experiment? (Think: is it ethical to force someone to do something that could possibly harm them?) _____