Discussed the following scenarios as a whole class.

A group of college students were given a short course in speed-reading. The instructor was curious if a monetary incentive would influence performance on a reading test taken at the end of the course.  Half the students were offered $5 for obtaining a certain level of performance on the test, the other half were not offered money.

1. Control students that were not offered money

2. Independent Variable money

3. Dependent Variable performance on the test

A doctor noticed that several of her patients with skin cancer were customers of tanning beds. She decided to conduct a study to see if the amount of exposure to ultraviolet rays increased the risk of cancer. Over a period of six months, she compared a group of 50 patients that spent 6 to 8 hours per week exposed to ultraviolet rays through tanning beds with a group of 50 patients that received 0-30 minutes of ultraviolet rays.

1. Control 50 patients receiving 0-30 minutes of rays

2. Independent Variable time exposed to ultraviolet rays in tanning beds

3. Dependent Variable amount of skin cancer

Reviewed the following:

Steps of the Scientific Method

1. STEP ONE:

**ASK a question**

2. STEP TWO:

**Draw a HYPOTHESIS**

3. STEP THREE:

**TEST**

4. STEP FOUR:

**ANALYZE**

5. STEP FIVE:

**DRAW CONCLUSIONS**

6. STEP SIX:

**COMMUNICATE**

**1. CONTROL: The part of the experiment that is NOT being tested—used for comparison. What I keep the same.**

**2. INDEPENDENT VARIABLE: The part of the experiment that is changed by the person performing the experiment.**

**3. DEPENDENT VARIABLE: What I observe during the experiment.**

**THREE guidelines for a good controlled experiment:**

* Have a control group which is used for comparison.
* Test only ONE thing at a time – have only one INDEPENDENT VARIABLE.
* Have the largest possible SAMPLE SIZE.