Name _____Date _____Period _____

Investigation practice

<u>Part 1:</u> Read the following scenario and answer the following questions in *complete* sentences.

Sponge Bob is out of control!

SpongeBob likes to garden and wants to grow roses for his friend Sandy. He buys a fertilizer called "Flower Power" to see if it can help his plants grow more flowers. SpongeBob plants two rose plants of the same size in separate containers with the same amount of dirt. He puts one plant by a sunny window and waters it daily with water that has fertilizer. He puts the other plant in a dark closet and waters it every other day with plain water.

1. What is SpongeBob trying to investigate in this experiment? What does he want to know? *(problem)*

2. What are two things that affect how flowers grow in general? (*variables)*

3. Will SpongeBob know if **only** the fertilizer is helping his plant grow? Why or why not?

4. According to what SpongeBob wants to find out, what is his…

    a. Independent variable?

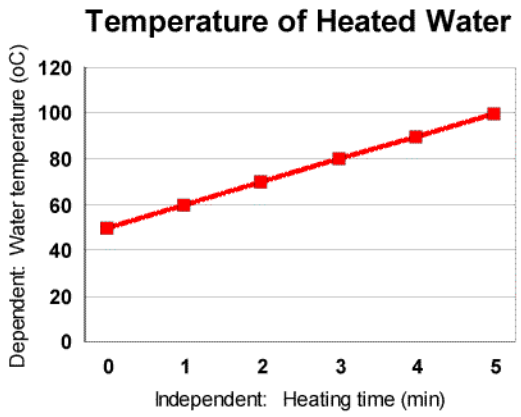
    b. Dependent variable?

5. Is this a quality experiment? Explain your answer.

6. What are two things SpongeBob could do to improve his experiment?

Name _____Date _____Period _____

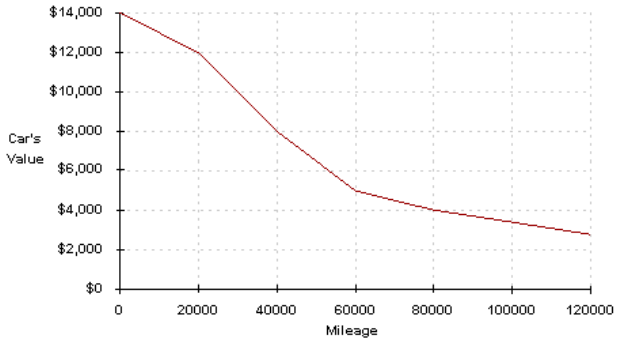
Part 2: Graphing Review



On which axis is the independent variable?

On which axis is the dependent variable?

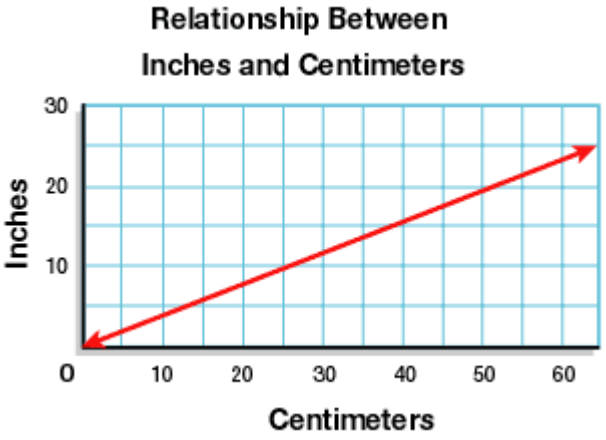
How does the heating time affect the water temperature?



What is missing on this graph?

What is the independent variable?

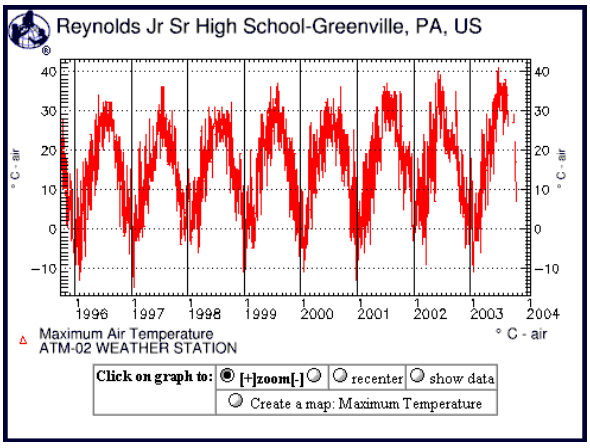
What is the dependent variable?



What is the independent variable?

What is the dependent variable?

As the centimeters increase so do the inches. What are two points that prove this relationship?



What is the independent variable?

What is the dependent variable?

Why does the air temperature have this pattern year after year?