

Station 4

Mouse Experiment

An experiment studies the effects of an experimental drug on the number of offspring a mother mouse has. 10 female mice are given the drug and then impregnated. The number of mice in their litters is compared to the litters of mice that did not take the drug.

Number of Babies in Litter										
Group A (drug)	5	6	4	8	5	2	7	12	12	8
Group B (control)	4	4	6	6	5	6	4	7	5	3

1. Based on the data, what would you conclude about the drug? Did the drug work?

Yes, the drug is effective because 7/10 times group A produced more mice offspring than group B.

Cow Growth Rates

A type of feed claims to boost the growth rate of cows. The feed is tested on two twin newborn cows. Bessie receives the experimental feed, and Bertha receives regular corn feed. Their weights are recorded below.

Cow	Months of the Year				
	April	May	June	July	Aug
Bessie	100 lbs	210 lbs	260 lbs	320 lbs	400 lbs
Bertha	100 lbs	250 lbs	290 lbs	340 lbs	400 lbs

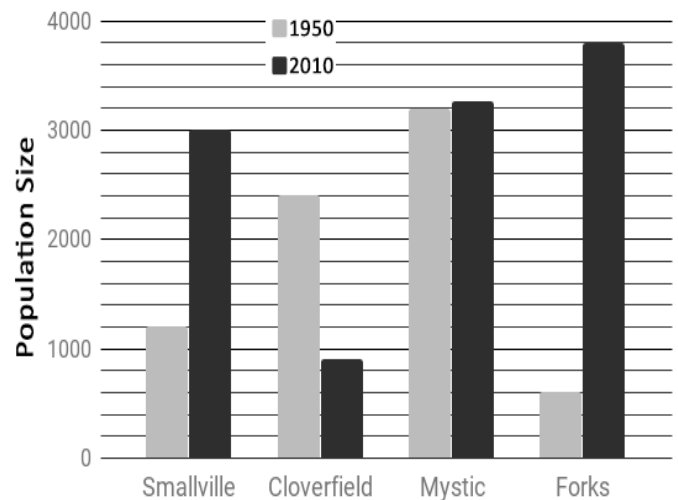
2. Graph the data on your answer sheet. Use a dotted line for Bessie and a straight line for Bertha. X-axis is independent variable, Y-axis is dependent variable. ***Know where to plot the X and Y axis variables!!!***

3. Both cows ended at the same weight, but did the experimental feed change the way they gained weight at all? Describe your conclusions about the experimental feed and explain why it is important that the experiment used twin cows. **Yes, the feed changed the way they gained weight. Using twins means they have almost the same body shape and DNA, so the experiment is an accurate portrayal of how effective the feed works. Bertha packed on more weight than Bessie.**

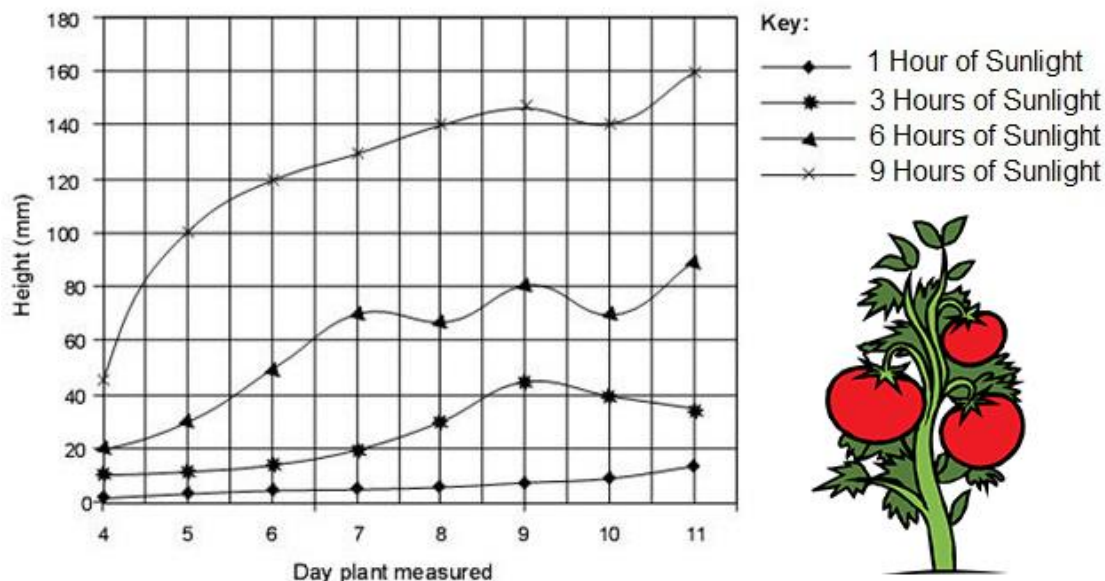
Station 5

Town Populations

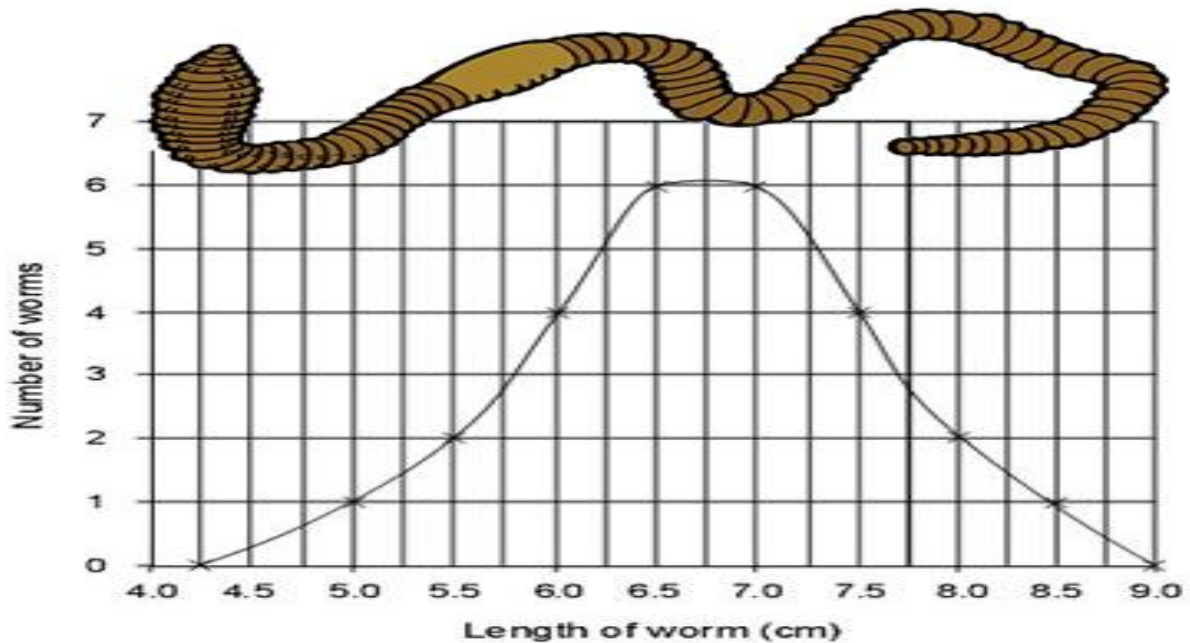
1. According to the graph, which town grew the fastest? **Forks**
2. Which town declined in population? **Cloverfield**
3. Which town had the smallest change in population? **Mystic**
4. What is the population of Forks in 2010? **3,800**



This line graph compares the growth of plants that were kept in the sun for different amounts of time.



5. On Day 7, the plants kept in the sun for 3 hours were how tall? 20 mm
6. On Day 7, the plants kept in the sun for 6 hours were how tall? 70 mm
7. On Day 10, the plants kept in the sun for 9 hours were how tall? 140 mm
8. On Day 11, the plant that was grown with 1 hour of sunlight was how tall? *18 mm (Answers will vary)
9. Based on the graph, the plant grows best in what amount of sunlight? 9 Hours



10. What length of worm is most common? 6.5-7.0 OR 6.75 cm
11. What was the longest worm found? 8.5 cm
12. How many worms were 6 cm long? 4
13. How many worms were 7.25 cm long? 5
14. The peak of the curve represents the [longest worms / average worms / shortest worms]