

Name _____

Date _____

Experimental Design- Jurassic Park

1. List all of the "tools" that scientists use to solve problems.

2. Which of these tools did they use in the movie?

3. What is the question/problem that they are trying to solve?

4. What are some of the observations that they made?

5. What was the hypothesis that they made? (Be sure it is in If/then form)

6. What did she intend to do to figure out what was causing the problem?

7. What are some additional hypotheses you can make from your observations?

8. If no dino droppings were available or if you refused to study them, what sort of experiment could you set up to see if it was the West Indian lilac consumption that caused the dinosaur to get sick? (write a step by step procedure)-Use the back of the paper.

Given the following procedure:

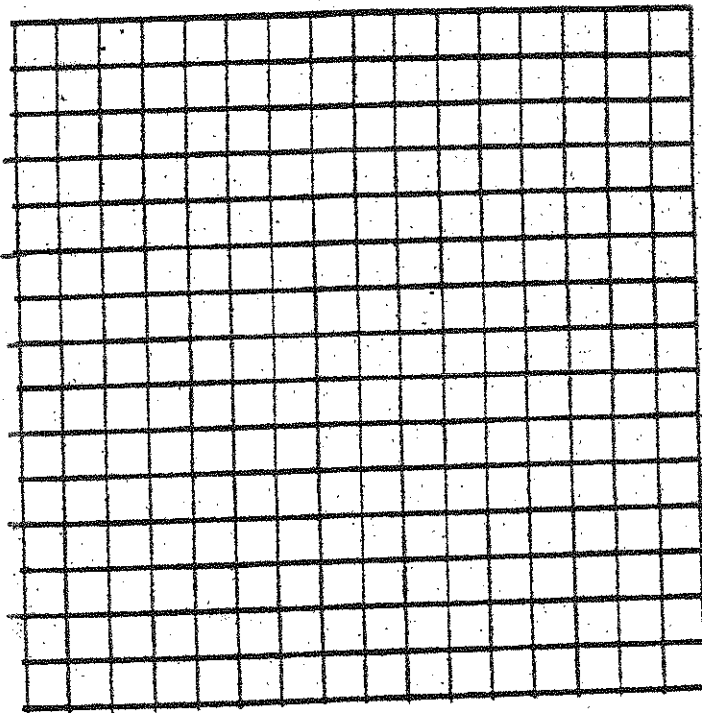
- 1-using 10 triceratops all the same age and sex divide them into 5 groups of 2
 - 2-place all dinosaurs in the same location with the same amount of sunlight, same temperature, same amount of water, adequate rest, etc.
 - 3-give the first group a mixture of dinosaur food containing no West Indian lilac 6X/day
 - 4-give the second group a mixture of dinosaur food containing 100 L of West Indian lilac 6X/day
 - 5-give the third group a mixture of dinosaur food containing 200 L of West Indian lilac 6X/day
 - 6-give the fourth group a mixture of dinosaur food containing 300 L of West Indian lilac 6X/day
 - 7-give the fifth group a mixture of dinosaur food containing 400 L of West Indian lilac 6X/day
 - 8-do this everyday for 6 mos carefully recording the data and record observations on the behavior of the animals
9. What is the independent variable?
10. What is the dependent variable?
11. What are the constant variables?
12. Which is the control group and what purpose does the control group serve?
13. Set up a data table to record your observations:

Given the data:

Group Number	amount of West Indian Lilac (L)	health observations
1	0	not sick for 6 mos
2	100	sick in month 5 on
3	200	sick in month 4 on
4	300	sick in month 3 on
5	400	sick in month 2 on

14. Construct a graph to represent your data.

- place the independent variable on the x-axis
- place the dependent variable on the y-axis
- don't forget to title your graph and the axes



15. Draw conclusions based on your data and tell whether your hypothesis was supported or rejected.

