NAME_____ S.N. ____ DATE_____ PER.___

THE GREAT FOSSIL FIND

WORKSHEET

A. Day 1 (4 bones): Type of animal suspected:_____

B. Day 2 (7 bones): Type of animal suspected:_____

C. Day 3: (10 bones): Type of animal suspected:_____

D. Day 4: (collaboration with another team): Type of animal suspected:_____

E. Day 5: (after consulting resource booklet)): Type of animal suspected:_____

QUESTIONS

1. Did you make any assumptions or inferences at the beginning of the activity that kept you from assembling the "right" skeleton (i.e. your final interpretation)? _____ Explain:

2. Did the discovery of new bones cause any conflict within your group? _____ Explain:

3. Did any of your group members resist changing in light of the new information? _____ Explain:

4. Did the information from another group influence your assumptions? _____ If so, what info?

5. Did the resource booklet **confirm** your group's ideas, or did it cause you to rework your arrangement of the fossil parts? _____Explain.

6. If this "Fossil Find" scenario is typical of the work of scientists, what features of the nature of science does it demonstrate?

7. From looking at the fossil and the resource manual, what could you say about how and where this animal lived?

8. Is it possible for scientists to do studies about things that happened millions of years ago? _____ Explain.

9. Below, or on the back of this sheet, list what you see as the 3 goals of this experience.

Observation And Inference

Name_____

Observing is: _____

Information gathered from observations is called evidence, or data. Making and recording observations is the most basic science skill.

Go outside and find a car in the parking lot. Please choose a car that is unfamiliar to you. (You can't know the person that owns the car!)

Make and record 10 observations about the car.

1. _____
2. _____
3. _____
4 _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Quantitative vs. Qualitative Observations
Quantitative observations are:_____

Qualitative observations are:
_____

Review your observations of the car. If the observation is quantitative, place a + next to it. If it is qualitative, place a - next to it.

Inferences
An inference is: _____

Review your list of observations of the car. Are any of your observations an inference? If so, circle it.

Conclusion
Briefly summarize the importance of observing in science and the difference in an observation and an inference.