Name: _____ Period: _____ Date: _____

Making Observations Assignment   **Physical Science**

Observations and Inferences Worksheet

This assignment will be discussed in your next class period. Do both sides. You will be asked to do similar things on your Unit Proof. Make sure that you understand the differences between <u>qualitative observations</u>, <u>quantitative observations</u> and <u>inferences</u>.

Part One:

Read the following sentences carefully. Determine if the sentence is an observation (O), an inference (I), or a prediction (P). On the line to the left of the sentence write your answer.

1. _____ The mineral on the table is transparent and smooth.

2. _____ If I touch the hot pot-handle I will burn my hand.

3. _____ The stream is not polluted.

4. _____ It must have rained because there are many puddles.

5. _____ The stream velocity (speed) is 20 mph.

Part Two:

Read the following sentences carefully. For each sentence, underline the observation and circle the inference.

6.   The people down the street must be having a barbecue because the air smells of smoke and burnt chicken.

7.   There is a baseball in my driveway and my car windshield is broken. Someone playing ball must have shattered my windshield.

8.   The rock has scratches and is very polished. This rock was carved by a glacier.

Part Three:

Look at the diagram below. Read the statement and determine if it is an observation (O) or an inference (I). Write your answer on the line to the left.

9. _____   The plant has roots.

10. _____   The plant uses water.

11. _____   The plant has flowers.

12. _____   The plant has stems.

13. _____   The plant grew from a seed.

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Making Observations Assignment

Physical Science

Part Four:

Take a walk around your backyard or neighborhood. Make six observations (3 quantitative and 3 qualitative) and three inferences about nature. Be prepared to share them in class. Write your observations on the back.

Qualitative Observations:

1. _____

2. _____

3. _____

Quantitative Observations:

1. _____

2. _____

3. _____

Inferences:

1. _____

2. _____

3. _____