

## Summer Science Observations

You may remember at the beginning of last year, I asked you to look outside and make observations. There were lots of questions about the point of such an activity but I hope you now realize the importance of observations in the world of science. This summer, it is time to test these observation skills you have developed over the past year. Take the time this summer to walk outside with your family and write down **15 interesting observations** about the wildlife around you (can be plants, animals, and fungi). With these observations you likely have **questions** that accompany them, please write these down as well. All completed summer science packets should be sent to me at [canderson@derechhatorah.org](mailto:canderson@derechhatorah.org). Don't hesitate to contact me with any questions.

### Example:

Observation

- One of the trees in this forest has no leaves.

Question

- Why has this tree lost all of its leaves?
- Why do all of the trees in this forest have leaves except one?

Now, there are many answers to these questions but it is up to you to decide the best course of action to take in order to find out the answer! In order to do this, you must come up with a testable hypothesis. Remember, a hypothesis is a proposed explanation made on the basis of limited evidence as a starting point for further investigation. We can write this as an “**if** \_\_\_\_\_ , **then** \_\_\_\_\_” statement.

### Example:

Hypothesis

- If a tree has no leaves when others surrounding it do, then it must be dead.

Please write hypotheses for **10** of your observations.

You will then have to decide the best way to **test** each hypothesis. Please follow the example below. Create reasonable tests for **5** of your hypotheses. \*Note\* You do not need to actually test your hypothesis.

Test

- I will break a small branch of a tree with leaves and look for green tender wood inside. This is a sign that it is alive. I will then break a small branch of a tree with no leaves and compare them.

Name: \_\_\_\_\_

**Worksheet: Write your observations and questions below**

**Observations and questions:**

1) \_\_\_\_\_  
\_\_\_\_\_

2) \_\_\_\_\_  
\_\_\_\_\_

3) \_\_\_\_\_  
\_\_\_\_\_

4) \_\_\_\_\_  
\_\_\_\_\_

5) \_\_\_\_\_  
\_\_\_\_\_

6) \_\_\_\_\_  
\_\_\_\_\_

7) \_\_\_\_\_  
\_\_\_\_\_

8) \_\_\_\_\_  
\_\_\_\_\_

9) \_\_\_\_\_  
\_\_\_\_\_

10) \_\_\_\_\_  
\_\_\_\_\_

11) \_\_\_\_\_  
\_\_\_\_\_

12) \_\_\_\_\_  
\_\_\_\_\_

13) \_\_\_\_\_  
\_\_\_\_\_

14) \_\_\_\_\_  
\_\_\_\_\_

15) \_\_\_\_\_  
\_\_\_\_\_

**Hypothesis: Write your hypothesis below for your 10 chosen observations**

1) \_\_\_\_\_  
\_\_\_\_\_

2) \_\_\_\_\_  
\_\_\_\_\_

3) \_\_\_\_\_  
\_\_\_\_\_

4) \_\_\_\_\_  
\_\_\_\_\_

5) \_\_\_\_\_  
\_\_\_\_\_

6) \_\_\_\_\_  
\_\_\_\_\_

7) \_\_\_\_\_  
\_\_\_\_\_

8) \_\_\_\_\_  
\_\_\_\_\_

9) \_\_\_\_\_  
\_\_\_\_\_

10) \_\_\_\_\_  
\_\_\_\_\_

**Test: Write your proposed tests for your 5 hypotheses below (Note: you do not actually need to perform these tests)**

1) \_\_\_\_\_  
\_\_\_\_\_

2) \_\_\_\_\_  
\_\_\_\_\_

3) \_\_\_\_\_  
\_\_\_\_\_

4) \_\_\_\_\_  
\_\_\_\_\_

5) \_\_\_\_\_  
\_\_\_\_\_