**Environmental Science Unit 1 Test: Study Guide Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

What is Environmental Science? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What fields make up environmental science? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |
| --- | --- | --- |
| Basic Unit for Mass | Basic Unit for Length | Basic Unit for Volume |
|  |  |  |

9 m = \_\_\_\_\_\_\_\_\_km 8 cm = \_\_\_\_\_\_\_\_\_\_ mm 7.4 km = \_\_\_\_\_\_\_\_\_\_ m

Would the gymnasium be measured in mm, cm, m, or km? \_\_\_\_\_\_\_\_\_\_\_\_\_ *Review your metric measurements lab.*

**Scientific Method**

1. What is a control group?
2. How many variables should you change in an experiment?
3. What is a Quantitative observation? Give one example?
4. What is a Quantitative observation? Give one example?
5. Provide an example of data that is both qualitative and quantities?
6. What is an independent variable?
7. What is a dependent variable?
8. Why is it important to have repeated trials in an experiment?
9. What is a hypothesis?
10. What is a theory?

Identify a-f in the scientific method scenario below:

Gloria wanted to find out if the color of food would affect whether kindergarten children would select it for lunch. She put food coloring into 5 identical bowls of mashed potatoes. The colors were plain, red, green, yellow, and blue. Each child chose a scoop of potatoes of the color of their choice. Gloria did this experiment using 100 students. She recorded the number of students that chose each color.

1. Question:
2. Hypothesis:
3. Control group:
4. Experimental group:
5. Independent variable:
6. Dependent variable:

Place the following steps of the scientific method in order 1-6.

\_\_\_\_ record and analyze data \_\_\_\_ form a hypothesis \_\_\_\_ make an observation

\_\_\_\_ set up a controlled experiment \_\_\_\_ Communicate Results \_\_\_\_ Identify a problem

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Kilo (k) | Hecto (h) | Deca (D) | Meter (m), Liter (l), Gram (g) | Deci (d) | Centi (c) | Milli (m) |
| 1000 | 100 | 10 | 1 | 0.1 | 0.01 | 0.001 |

**Metric Practice**

To convert to a smaller unit, move the

decimal point to the \_\_\_\_\_\_\_ or \_\_\_\_\_\_ by 10.

To convert to a larger unit, move the decimal point to the \_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_ by 10.

**Basic Unit**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1. 39 m | \_\_\_\_\_\_\_\_\_\_\_\_cm |  | 2. 48 km | \_\_\_\_\_\_\_\_\_\_\_\_Dm |
| 3. 50 cm | \_\_\_\_\_\_\_\_\_\_\_\_dm |  | 4. 38 km | \_\_\_\_\_\_\_\_\_\_\_\_hm |

**Name 10 Famous Environmentalist and their major contributions:**

**1.**

**2.**

**3.**

**4.**

**5.**

**6.**

**7.**

**8.**

**9.**

**10.**

**What is an ecological footprint?**

**What does an ecological footprint measure?**

**What is earth overshoot day?**

**How much bio-productive land and sea is available globally?**

**On average, how much bio-productive land and sea do humans use?**