Biology Review Sheet

Basic Science Skills Unit

Test Date = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| 1. List situations that could occur during a lab in which you should notify the teacher.
 |  |
| 1. Which piece of safety equipment would you use to….
2. Put out a fire in the trash can
3. Put the fire out that has erupted on your lab partner
4. Get chemicals out of your eyes
 |  |
| 1. What is ONE safety rule you should ALWAYS follow?
 |  |
| 1. Should you ever “guess” about what steps you should take during a lab if you are unsure or in doubt about any part of a lab?
 |  |
| 1. List the steps of the scientific method in order.
 | *
*
*
*
*
*
*

  |
| 1. What do we call information that we gather during an experiment?
 |  |
| 1. When you suggest that warm water will melt snow and ice, you have made what type of statement?
 |  |
| 1. Is/can a hypothesis….
2. Ever proven?
3. Accepted as correct with being tested with an experiment?
4. Be disproven by a single experiment?
 | a.b.c. |
| 1. When is a hypothesis useful?
 |  |
| 1. What is the purpose of an experiment?
 |  |
| 1. How many trials/samples for each experimental group should be tested during an experiment that is using a good experimental design?
 |  |
| 1. How many variables are tested in a controlled experiment?
 |   |
| 1. Use the following picture to answer questions differentiating **qualitative** and **quantitative** data:

1. Fido has big eyes.
2. Fido has two eyes.
3. Fido has one nose.
4. Fido has a long nose.
5. Fido has a wide collar
 | a.b.c.d.e. |
| 1. Use the following diagram to determine whether each statement is an **Inference** or an **Observation.**

1. She is holding a stop sign
2. It is windy outside
3. She is wearing a dress
4. She is happy
5. She is working at a cross walk.
6. There are four letters on the sign.
7. Her mom made her pancakes for breakfast.
 | a.b.c.d.e.f.g. |
|  |  |
| 1. What is information gathered by using one of the five senses called?
 |  |
| 1. When we use numbers to describe objects, we are being \_\_\_\_\_\_\_.
 |  |
| 1. When we use words/descriptions to describe objects, we are being \_\_\_\_\_.
 |  |
| 1. What is the act or process of deriving a conclusion based solely on what one already knows called?
 |  |
| 1. Which variables are…
2. Observed to measure a change as a result of the independent variable?
3. Graphed on the y-axis?
4. Controlled and changed by the person conducting the experiment?
5. Graphed on the x-axis?
 | a. b.c.d |
| 1. List all of the steps that you need to follow when labeling a graph. Remember “TAILS DRY MIX”
 |   T.A.I.L.S.D.R. Y.M.I.X. |
| 1. Which part of the scientific method is stated as an “If, then” statement?
 |  |
| 1. Which part of an experiment is changed by the experimenter?
 |  |
| 1. Which part of an experiment is measured or the outcome?
 |  |
| 1. Which group in an experiment gets the “special treatment”?
 |  |
| 1. Which group in an experiment does not get the “special treatment”? This group is used for comparison.
 |  |
| 1. Use the following data chart to answer the questions listed after the chart:

Number of Baskets Made by FVHS Basketball Team

|  |  |  |
| --- | --- | --- |
|  | Group 1 Baskets Made | Group 2 Baskets Made |
| Day 1 | 55 | 40 |
| Day 2 | 58 | 45 |
| Day 3 | 62 | 48 |
| Day 4 | 62 | 50 |
| Day 5 | 65 | 53 |
| Day 6 | 66 | 54 |
| Day 7 | 69 | 59 |

1. On which day did Group 1 make 10 more baskets than Group 2?
2. On which day did Group 2 make 50 baskets?
3. How many days did Group 1 make 62 baskets?
 | a.b.c. |
| 1. What unit do we use in Biology when we are measuring mass?
 |  |
| 1. Which piece of lab equipment is used to most accurately measure volume of a liquid?
 |  |
| 1. Which part of an “If, then” statement is the independent variable?
 |  |
| 1. Which part of an “If, then” statement is the dependent variable?
 |  |
| 1. Which piece of lab equipment would you use to measure the mass of an object?
 |  |
| 1. What is the use of this piece of lab

 equipment?beaker.jpg |  |
| 1. What is the use of this piece of lab

 equipment?Vee+Gee+20231+Erlenmeyer+Flask.jpg |  |
| 1. What is the use of this piece of lab

 equipment?imagesCAJW206C.jpg |  |
| 1. What is the use of this piece of lab

 equipment?imagesCABV2LLF.jpg |  |
| 1. What is the use of this piece of lab

 equipment?41MxKeuWijL__SL500_AA300_.jpg |  |