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 |  |