Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_

How much water did you drink yesterday?

Be as accurate as possible #1

Number of bottles of water

 Number Total Ounces

 16.9 ounces X \_\_\_\_\_ = \_\_\_\_\_\_\_

 32 ounces X \_\_\_\_\_ = \_\_\_\_\_\_\_

Number of glasses of water

 Number Total Ounces

 8 ounce glasses X \_\_\_\_\_ = \_\_\_\_\_\_

 12 ounce glasses X \_\_\_\_\_ = \_\_\_\_\_\_

 32 ounce glasses X \_\_\_\_\_ = \_\_\_\_\_\_

 Trips to the water fountain

 Number Total Ounces

 4 ounces per visit X \_\_\_\_\_ = \_\_\_\_\_\_

 TOTAL OUNCES OF WATER \_\_\_\_\_\_\_\_

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_

**Blind Water Sample Experiment**

(Do you know what you’re drinking?)

**Purpose –**The student will be able to determine if it is the difference in taste or in packaging that most influences their choice of water.

**Hypothesis** –

Can you decipher between the tastes of various samples of water ? \_\_\_\_\_\_\_\_

**Experiment**

Taste each of the samples of chilled water, decide which is tap, filtered and bottled spring water. Circle your conclusion.

1. Sample A

 Tap Filtered Bottled spring water

1. Sample B

 Tap Filtered Bottled spring water

1. Sample C

 Tap Filtered Bottled spring water

Results

1. Sample A **\_\_\_\_\_\_\_\_\_\_\_\_\_**
2. Sample B **\_\_\_\_\_\_\_\_\_\_\_\_\_**
3. Sample C **\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Conclusion**  - What did you learn about your ability to distinguish the tastes of various samples of water?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Would this information change your choice of water you drink in the future? \_\_\_\_\_\_\_\_\_\_\_\_Why or why not? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_

The Match Game

 Vocabulary/Questions Definition/Answer

|  |  |
| --- | --- |
| Purpose of Experiment  | The overriding reason for the experiment |
| Hypothesis | A suggested answer to a scientific question that can be answered |
| Experiment | An objective trial in order to discover or establish facts |
| Conclusion | The result |
| Theory | A proposed explanation of findings |
| Blind Sample | Information that is concealed |
| Finding Percent of Change | $$\frac{difference in the two values}{original amount} ∙100$$ |
| If you got 8 questions right out of 10 total questions, what percent did you get right? | 80% |
| Multiplying Fractions | Multiply the numerators and then the denominators. Reduce your answer and round to the nearest whole number.  |
| Round 56.5 to the nearest whole number  | 57 |
| Round 56.4 to the nearest whole number | 56 |
| Percentage | A rate or proportion per 100 |
| Mode | The number that occurs most frequently. |

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_

**How Much Water Do You Need?**

The amount of water you need depends on several factors.

* **Normal Activity Level** - needs 1/2 ounce of water **per** pound of Body Weight,
	+ - multiply 1/2 by your body weight over one
		- $\frac{1}{2}∙\frac{body weight}{1}$ = number of ounces of water you need
* Multiply the numerators and then the denominators. Reduce your answer and round to the nearest whole number.

For example, Ms. Pearson weighs 145 pounds and is moderately active. How many ounces of water does she need to drink every day?

 $\frac{1}{2}∙\frac{145}{1}= \frac{145}{2}=72.5$ So, she needs 73 ounces of water every day.

* **Active Activity Level** - needs 2/3 ounce of water **per** pound of Body Weight,
	+ - multiply 2/3 by your body weight over one
		- $\frac{2}{3}∙\frac{body weight}{1}$ = number of ounces of water you need
* Multiply the numerators and then the denominators. Reduce your answer and round to the nearest whole number.

For example, Ms. Pearson weighs 145 pounds and is moderately active. How many ounces of water does she need to drink everyday?

 $\frac{2}{3}∙\frac{145}{1}= \frac{290}{3}=96.66$ So, she needs 97 ounces of water everyday.

**What is your activity level?** \_\_\_\_\_\_\_\_\_\_\_\_

**Your Body Weight** \_\_\_\_\_\_\_\_\_

**How much water do you need? ANSWER\_\_\_\_\_\_\_\_\_**

**Do your calculations here**.

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_

How much water did you drink yesterday?

Be as accurate as possible #2

Number of bottles of water

 Number Total Ounces

 16.9 ounces X \_\_\_\_\_ = \_\_\_\_\_\_\_

 32 ounces X \_\_\_\_\_ = \_\_\_\_\_\_\_

Number of glasses of water

 Number Total Ounces

 8 ounce glasses X \_\_\_\_\_ = \_\_\_\_\_\_

 12 ounce glasses X \_\_\_\_\_ = \_\_\_\_\_\_

 32 ounce glasses X \_\_\_\_\_ = \_\_\_\_\_\_

 Trips to the water fountain

 Number Total Ounces

 4 ounces per visit X \_\_\_\_\_ = \_\_\_\_\_\_

TOTAL OUNCES OF WATER \_\_\_\_\_\_\_\_

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_

**What does all this mean?**

1. Let’s compare how much water you need versus how much water you drink.
2. Let’s see if there is a difference in the amount of water you drank on day 1 versus day 2.
3. Find the percent of change in the amount of water that you drank on day 1 versus day 2.

**Percent of change =** $\frac{difference in the two values}{original amount} ∙100$

For example, if you drank 30 ounces of water on day 1 and 70 ounces of water on day 2, what is the percent of change?

 **Percent of change**= $\frac{70-30}{30} $

 = $\frac{40}{30}=1.3333$ Multiply by 100, and the percent of change is 133%

The **percent of change** of the intake of water over the two days was 133%. Wow!

1. Find the average amount of water you consumed during the two days.

**Average (Mean) =** $\frac{Day 1+Day 2}{2}$

Write down the amount of water you should consume based on your activity level & weight \_\_\_\_\_

Write down the amount of water you consumed on Day #1 \_\_\_\_\_\_\_\_\_\_\_\_\_

Write down the amount of water you consumed on Day #2 \_\_\_\_\_\_\_\_\_\_\_\_\_

**SHOW WORK FOR THE DATA YOU DISCOVERED.**

1. Find the percent of change in the water you drank from day 1 to day 2. \_\_\_\_\_\_\_\_\_\_
2. Find the average amount of water you consumed during the two days .\_\_\_\_\_\_\_\_\_\_
3. Find the percent of change from your calculated average you consumed to the amount you need.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Let’s Graph It ! ! !**

**Let’s graph how much water you need, how much water you drank on day 1, and how much water you drank on day 2 on the graph below.**

**Number of ounces of water**

10

30

50

70

90

110

130

150

170

0

Amount Needed

Day 2

Day 1

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_

**Learning Outlook Experiment**

I. **Purpose** – the student will use the data acquired in the days of experimentation to better understand how they act in response to information given in class.

II. **Hypothesis** – Do you change the way you approach life based on information given in classes.\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Why or why not? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

III. **Experiment** (Outline what did you do each day?)

Day 1 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Day 2

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Conclusion** (What did you discover about how you respond to new information?)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Theory**  (What did you learn about how you learn that you can apply in every new learning situation?)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_