

1. Title: Designing an atomic model of Lithium

a. Purpose = visualize what an atom would look like if it were to be blown up. (how big the nucleus is to the size of the entire atom and how much empty space an atom is)

b. Procedure =

- i. Choose a spherical object (this will represent a nucleus)
- ii. Determine the diameter of the spherical object
- iii. Multiply that spherical object diameter by 60,000. (this will represent the size of the entire atom if we use hydrogen as an example)
- iv. Create a visual of the blown up atom.
- v. You may write down the teacher example to help you figure out your example

2. Title = Skittles/isotope Lab (you may write whatever you would like to about this lab in your journal. Remember that you can use your journal as a reference on your tests.)

Skittles Lab: Isotopes and Calculating Average Atomic Mass

Objective:

1. Show how Skittles can be an analogy for isotopes
2. Calculate the atomic mass for the element Sk (skittles)

Procedure:

1. Obtain a snack bag of skittles
2. Record the mass of each skittle as either 1.1, 1.0, or .9 grams (it would be easiest to make a data table of this information.)
3. Calculate what percent of each mass the skittles bag contains.
4. Multiply each percentage (in decimal form) by it's corresponding mass. (example = if 50% had a mass of .9g then multiply .5 by .9 and get an answer)
5. Calculate the average atomic mass of a skittle by adding the three answers in number 4.
6. Repeat this procedure for the class data.
7. Write a bullets/sentences that discuss what was reinforced with this journal. ("beef up your journal")

3. Title = Element property card game

Objective = experience the process of organizing information using trends (similar to the periodic table)

Procedure:

1. Cut out the element property cards attached to your lab packet
2. Arrange your cards so that there are distinct trends going across each row **and** down each column.
3. You will have empty spots on your table where a card should fit but you do not have one that fills that spots requirements. Use a blank card for that spot. (you may or may not use all 3 blank cards available)

4. On a separate sheet of paper draw your element chart showing the order of the element letters only.
5. For any blank cards that you placed on your chart fill in the information that should have been on that card.
6. Indicate at least two trends that were used to organize going across from left to right and at least two trends going down a column.
7. How did you know when to start a new row?
8. Turn in your chart with the above questions answered. You may place any information pertinent to this lab in your journal.

4. Flame test simulation (instructions will be given in class)

5. Flame test lab (see attached lab sheet)