

EXPERIMENT 1: LOW SODIUM

You go to the family doctor and he decided to put you on a special diet. He tells you that you have been eating too much sodium. He is an old chemist and he tells you not to eat more than 0.01 moles of sodium. This sounds pretty easy, until you go home and find out that all of the food items list the amount of sodium in mg (milligrams). How do you follow your doctor's orders? Which foods can you eat?

HINTS:

First determine the atomic weight of sodium. It is on the periodic chart and the quantity is given as moles per gram (moles/gram). Record this quantity here _____

Remember that the atomic weight tells you how many grams of an element are in one mole. But you need to find out how many grams are in 0.01 moles. To find out how many grams of sodium are in 0.01 moles, first convert grams of sodium in one mole to milligrams of sodium (1000 milligram = 1 grams) in one mole and then multiply by 0.01 moles. This will give you milligrams of sodium in 0.01 moles.

Do your calculation here:

milligrams (mg) of sodium in 0.01 moles = _____

Now set up your experiment.

Experiment 1: _____ Date: _____

Objective: _____

Hypothesis: _____

I. List the Materials you need:

MATERIALS

II. Write out the steps of your experiment in as much detail as possible.

EXPERIMENT

1. _____

2. _____

3. _____

4. _____

5. _____

