



## Candy Atoms

Be sure to keep the candy on napkins or in cups if you wish to act as the disposal for decayed candy at the end. No lab table candy can be eaten!

Purpose: Can you find the average atomic mass of your Skittles?

Uranium is an element that has many radioactive isotopes. Your Skittles package is a sample of some of those isotopes and can be used to find the average atomic mass of your sample. You can tell the atomic mass by the color. Please use the chart below to find the average atomic mass of your bag.

Color	Number of skittles	Percentage of skittles (in decimal form)	Mass of isotope	Total Mass (percentage x mass of isotope)
red			238	
yellow			235	
orange			232	
green			234	
purple			233	
Total		--	--	--

- 1) Please show all of your calculations for the average atomic mass of your sample here.
- 2) Is your mass the same as other student's? Gather at least three other student's data and compare them. Explain why your mass would be the same or different.
- 3) What are 2 ways to increase the reliability of your data?
- 4) Create a bar graph of your data to show your distribution of your isotopes. This should be done on graph paper and labeled correctly with a key and color.



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