

Isotopes of Pennies

Assessment Sheet

Applying What You Have Learned:

- Calculate the average mass of potassium if the abundance and atomic masses making up its naturally occurring samples are:

Potassium-39	93.12%	38.964
Potassium-41	6.88%	40.962

- Calculate the average mass of magnesium if the abundance and atomic masses making up its naturally occurring samples are:

Magnesium -24	78.70%	23.985
Magnesium -25	10.13%	24.968
Magnesium -26	11.17%	25.983

- The atomic mass of copper is 63.540 amu. It is composed of two isotopes, Cu-63 and Cu-65, with atomic masses of 62.930 and 64.928 respectively. What is the relative abundance (%) of these isotopes in naturally occurring samples of copper?
- What is the difference between mass number and atomic mass?
- Write a short summary explaining how this lab illustrates the concepts that you tried to explain at the beginning of the lab. Have your explanations changed? If so, explain how.