

## Answer to Question #62447, Chemistry / General Chemistry

Although there are three isotopes each for oxygen and magnesium, you only need to sort the two listed.

Average atomic mass values  
for planet X (amu)

Oxygen 16.09

Chlorine 36.97

Magnesium 25.31

Mg-24, Mg-25, O-16, O-18, Cl-37, Cl-35

Need to be sorted into: more abundant on Earth, More abundant on Planet X, approximately equal abundance on both planets

### Answer:

Average atomic mass values  
for planet Earth (amu)

Oxygen 15.9994

Chlorine 35.4527

Magnesium 24.312

more abundant on Earth	More abundant on Planet X	approximately equal abundance on both planets
Cl-35 Mg-24	O-18 Cl-37 Mg-25	O-16