

Isotope worksheet

Name _____

You have a small sample of iron, which you learn is made up of several isotopes.

| Isotope | Atomic Number | Atomic Mass | Protons | Neutrons | Electrons |
|---------|---------------|-------------|---------|----------|-----------|
| Fe-55 | _____ | _____ | _____ | _____ | _____ |
| Fe-56 | _____ | _____ | _____ | _____ | _____ |
| Fe-57 | _____ | _____ | _____ | _____ | _____ |

Your sample includes:

- 10 atoms of iron-55
- 40 atoms of iron-56
- 3 atoms of iron-57

Find the average atomic mass of this iron sample. Show all work.

Answer _____

You have a small sample of magnesium, which you learn is made up of several isotopes.

| Isotope | Atomic Number | Atomic Mass | Protons | Neutrons | Electrons |
|---------|---------------|-------------|---------|----------|-----------|
| Mg-23 | _____ | _____ | _____ | _____ | _____ |
| Mg-24 | _____ | _____ | _____ | _____ | _____ |
| Mg-25 | _____ | _____ | _____ | _____ | _____ |

Your sample includes:

- 5 atoms of Mg-23
- 100 atoms of Mg-24
- 40 atoms of Mg-25

Find the average atomic mass of this magnesium sample. Show all work.

Answer _____