

**How many neutrons are in each of the following isotopes:**

Magnesium-24 has \_\_\_\_\_ neutrons

Radon-222 has \_\_\_\_\_ neutrons

Mercury 201 has \_\_\_\_\_ neutrons

Aluminum-27 has \_\_\_\_\_ neutrons

Osmium-190 has \_\_\_\_\_ neutrons

Platinum-195 has \_\_\_\_\_ neutrons

**Name the isotope with the following combination of protons and neutrons.**

58 protons and 82 neutrons = \_\_\_\_\_

53 protons and 74 neutrons = \_\_\_\_\_

20 protons and 20 neutrons = \_\_\_\_\_

82 protons and 125 neutrons = \_\_\_\_\_

**Working with ISOTOPES**

- Atomic Number = number of \_\_\_\_\_.
- Mass Number = number of \_\_\_\_\_ + \_\_\_\_\_ in an atom of an isotope
- number of neutrons = \_\_\_\_\_ Number – \_\_\_\_\_ Number.

Fill in the table below with the appropriate information for each **isotope**:

| Isotope       | Atomic Number | Mass Number | # of protons | # of neutrons |
|---------------|---------------|-------------|--------------|---------------|
| Germanium-73  |               |             |              |               |
|               |               | 16          | 8            |               |
| Gold-197      |               |             |              |               |
|               |               | 9           | 4            |               |
| Hydrogen-3    |               |             |              |               |
| Plutonium-244 |               |             |              |               |
| Potassium-39  |               |             |              |               |
| Bromine-80    |               |             |              |               |

**Remember:** Atoms of the **SAME ELEMENT** with **DIFFERENT NUMBERS OF NEUTRONS** are called \_\_\_\_\_.