Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_ Block:\_\_**Isotopes and Calculating Average Atomic Mass HW**

**Example:**

 A sample of cesium is 75% 133Cs, 20% 132Cs, and 5 % 134Cs.What is its average atomic mass?

Answer: 0.75 x 133 = 99.75

 0.20 x 132 = 26.4

 0.05 x 134 = 6.7

 **Total = 132.85 amu** (atomic mass unit)

**Practice:** Determine the average atomic mass of the following mixture of isotopes.

1. 80% 127I, 17% 126I, 3% 128I
2. 15% 55Fe, 85% 56Fe
3. 95% 14N, 3% 15 N, 2% 16N

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_ Block:\_\_**Isotopes and Calculating Average Atomic Mass HW**

**Example:**

 A sample of cesium is 75% 133Cs, 20% 132Cs, and 5 % 134Cs.What is its average atomic mass?

Answer: 0.75 x 133 = 99.75

 0.20 x 132 = 26.4

 0.05 x 134 = 6.7

 **Total = 132.85 amu** (atomic mass unit)

**Practice:** Determine the average atomic mass of the following mixture of isotopes.

1. 80% 127I, 17% 126I, 3% 128I
2. 15% 55Fe, 85% 56Fe
3. 95% 14N, 3% 15 N, 2% 16N
4. 98% 12C, 2% 14C

**Conclusion:** Answer the following questions about isotopes.

1. Circle the symbols that represent isotopes of the same element.

24 23 12 52 24 6

X

X

X

X

X

X

12 11 6 4 11 3

1. Answer the following questions about isotopes.
	1. In what ways are isotopes of the same element similar?
	2. In what ways are isotopes of the same element different?
2. 98% 12C, 2% 14C

**Conclusion:** Answer the following questions about isotopes.

1. Circle the symbols that represent isotopes of the same element.

24 23 12 52 24 6

X

X

X

X

X

X

12 11 6 4 11 3

1. Answer the following questions about isotopes.
	1. In what ways are isotopes of the same element similar?
	2. In what ways are isotopes of the same element different?