

CHAPTER 4

STUDY GUIDE FOR CONTENT MASTERY

Section 4.3 *continued*

Use the figures to answer the following questions.

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|-----------|
| Osmium |
| 76 |
| Os |
| 190.2 |

| |
|-----------|
| Niobium |
| 41 |
| Nb |
| 92.906 |

27. What is the atomic number of osmium? _____
28. What is the chemical symbol for niobium? _____
29. What is the atomic mass of osmium? _____
30. What units is the atomic mass reported in? _____
31. How many protons and electrons does an osmium atom have? A niobium atom?

Calculate the atomic mass of each element described below. Then use the periodic table to identify each element.

32.

| Isotope | Mass (amu) | Percent Abundance |
|-----------------|------------|-------------------|
| ^{63}X | 62.930 | 69.17 |
| ^{65}X | 64.928 | 30.83 |

33.

| Isotope | Mass (amu) | Percent Abundance |
|-----------------|------------|-------------------|
| ^{35}X | 34.969 | 75.77 |
| ^{37}X | 36.966 | 24.23 |