

**Chapter 5**

Use with Section 2

**REINFORCEMENT****● The Nucleus**

Answer the following questions using information from the textbook.

1. Describe what the atomic number of an element refers to. \_\_\_\_\_  
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2. What are isotopes? \_\_\_\_\_  
\_\_\_\_\_
3. What is the strong nuclear force? \_\_\_\_\_  
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4. Explain what happens during transmutation. \_\_\_\_\_  
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5. Name two types of transmutations. \_\_\_\_\_
6. What is radioactive decay? \_\_\_\_\_
7. Describe an alpha particle. \_\_\_\_\_
8. Describe a beta particle. \_\_\_\_\_  
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9. What is meant by a half-life of a radioactive isotope? \_\_\_\_\_  
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10. Why are nuclear waste products a problem? \_\_\_\_\_  
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11. Why are tracer elements important? \_\_\_\_\_  
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