Key Concept How does Archimedes' principle describe the buoyant force?

Directions: *On the line before each statement, write* T *if the statement is true or* F *if the statement is false. If the statement is false, change the underlined word(s) to make it true. Write your changes on the lines provided. Use the diagram to answer numbers 1 through 5.*



_____ **1.** Archimedes' principle states that a buoyant force on an object is equal to the volume of the fluid that the object displaces. _____

_____ **2.** As the diagram shows, the weight of the water displaced by the balloon is greatest among the three different balls. _____

_____ **3.** The buoyant force does not depend on an object's depth in a fluid.

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_____ **4.** The diagram shows that the balloon has greater mass than the tennis ball or billiard ball. _____

_____ **5.** According to Archimedes' principle, the balloon has the greatest buoyant force because it displaces the most water. _____

_____ **6.** As the diagram shows, the buoyant force depends on an object's weight.

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_____ **7.** Concerning buoyant forces, it is important to remember that the greater the volume of an object is, the more it weighs. _____

_____ **8.** The buoyant force of an object does not change as the object moves deeper into a fluid. _____

LIVEWORKSHEETS