SECTION 2 Reinforcement

Why do objects float?

Directions: *In question 1, a code letter has been substituted for every letter of the alphabet. To find what the sentence says, use the following key to decode it. In the key, the code letters are shown directly below the letters they stand for. Write the correct letter above each code letter, then read the sentence.*

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
L	V	Y	Q	G	Z	M	O	B	P	F	S	R	J	D	T	E	N	I	H	X	C	K	M	A	U

1. ____ ____ ____ ____ ____ ____ ____ ____
HOG VXDALJH ZDNYG DJ LJ DVPGYH BI GEXLS

____ ____ ____ ____ ____ ____ ____ ____.
HD HOG KGBMOH DZ HOG ZSXBQ BH QBITSLYGI

2. The decoded sentence is a statement of what principle? _____

_____

Directions: *In the blank in front of the statement, write* **true** *if the statement is true. If the statement is false, change the underlined word or words to make the statement true.*

_____ 3. The pressure exerted on an object by a fluid is always <u>parallel</u> to the surface of the object.

_____ 4. The buoyant force <u>depends</u> on the shape of the object in the fluid.

_____ 5. As an object sinks deeper into a fluid, the buoyant force on it <u>remains the same</u>.

_____ 6. Density is <u>force/unit area</u>.

Directions: *Answer the following questions on the lines provided.*

7. Three different cubes, A, B, and C, are 2 cm along each side. Cube A has a mass of 3 g, cube B has a mass of 7 g, and cube C has a mass of 9 g. Which of these cubes will float in water? Explain.

_____

_____

_____

8. If you are floating motionless in a pool, how do you know that a buoyant force exists?

_____

_____

_____

Meeting Individual Needs

Copyright © Glencoe/McGraw-Hill, a division of the McGraw-Hill Companies, Inc.