

CHAPTER 10: ELECTRICITY

REVIEW

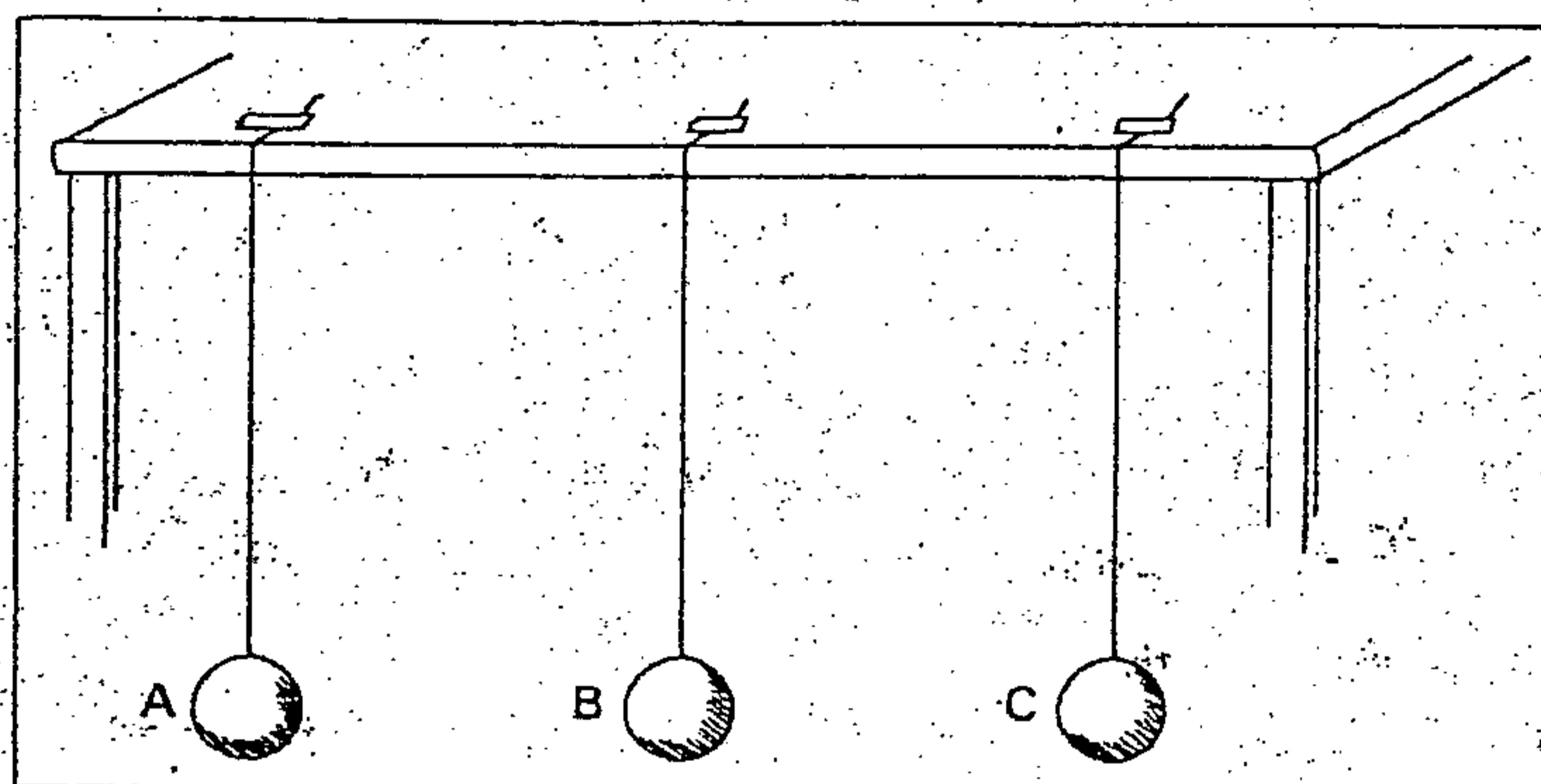


Fig. 10-1

1. Underline the answer that best completes each sentence.
 - a. If the two hanging spheres A and B are neutral, there is an electric force acting on a. A b. B c. both A and B d. neither A nor B.
 - b. A neutral object has a. unequal positive and negative charges b. equal amounts of positive and negative charges c. excess positive charge d. excess negative charge.
 - c. If sphere A is charged negatively and sphere B is neutral, sphere B will be a. attracted b. repelled c. unaffected d. charged positively.
 - d. Sphere A is charged negatively. The same amount of negative charge is also placed on sphere B. Spheres A and B will be a. attracted b. repelled c. not affected d. neutralized.
 - e. The negative charge on sphere A has been doubled. The electric force on sphere B will be a. the same b. doubled c. halved d. four times as great.
 - f. The negative charge on both spheres A and B has been doubled. The electric force on sphere A will be a. halved b. doubled c. the same d. four times as great.
 - g. If the distance between spheres A and B is halved, the electric force on either will be a. doubled b. halved c. the same d. four times as great.
 - h. Sphere B has a negative charge. The same amount of positive charge is placed on sphere C. Spheres B and C will be a. attracted b. repelled c. not affected d. neutralized.
 - i. If the charge on sphere C is tripled, the electric force acting on sphere B will be a. tripled b. $\frac{1}{3}$ as great c. 9 times as great d. $\frac{1}{9}$ as great.
 - j. If the distance between spheres B and C is increased, the force between B and C could be kept the same as before by a. decreasing the charge on B b. decreasing the charge on B and C c. increasing the charge on B and C d. keeping the same charge on B and C.

CHAPTER 10 REVIEW continued

- k. If the charge on A is halved and the charge on B is doubled, the electric force between A and B would be a. the same b. half as great c. twice as great d. four times as great.
- l. Spheres A, B, and C are all positively charged. Spheres A and C will a. attract b. repel c. not affect each other d. neutralize each other.
2. Complete the sentence: If a charged object has an electric force acting on it, there must be an _____ surrounding it.
3. Complete the puzzle by filling in the correct word for each definition. When the puzzle is complete you will find the hidden word that describes any material that prevents the flow of electrons.

- a. kind of charge on an electron
- b. allows electrons to move easily
- c. an insulator you can see through
- d. a movement of electrons
- e. used to describe something not seen directly
- f. all of these elements are conductors
- g. a negatively charged particle
- h. the charge on a proton
- i. positive particle found in matter

The hidden word is _____

Hidden Word

↓

a.											
	b.										
	c.										
		d.									
	e.										
	f.										
	g.										
		h.									
		i.									