Electric Charge and Static Electricity

Understanding Main Ideas
The person whose finger is shown below has walked across a carpet and is about to touch the doorknob. Answer the following questions on a separate sheet of paper.

1. Are the charges in the finger attracted or repelled by the charges in the doorknob? How can you tell?
2. What do the lines around the finger and doorknob represent?
3. One of a kind static electricity is a result of electrons moving into an object from another object. What is another way static electricity can build up in an object?

Building Vocabulary
From the list below, choose the term that best completes each sentence.

- conservation of charge
- static electricity
- conduction
- induction
- static discharge
- electric field
- friction
- electric force

4. In electricity, ________________ is the attraction or repulsion between electric charges.
5. The buildup of charges on an object is called ________________.
6. The law of ________________ states that charges are not created or destroyed. They are transferred.
7. The transfer of charge from one object to another by rubbing is called ________________.
8. The loss of static electricity as electric charges transfer from one object to another is called ________________.
9. A(n) ________________ is a region around a charged object where the object’s electric force is exerted on other charged objects.
10. The transfer of electrons from one part of an object to another part, caused by the electric field of another object, without the two objects touching is called ________________.
11. The transfer of charge when electrons move from a charged object to another object by direct contact is called ________________.