**PFC2 Chapter 16 Section 1 Guided Reading**

1. Explain what happens if you place a compass needle near a wire in a circuit.
2. Magnetism is created by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. How do you use the right-hand rule to find the direction of the magnetic field of a current-carrying straight wire?
4. The strength of a magnetic field near a current-carrying wire depends on two factors. Name them.
5. When a wire is made into a coil, the total magnetic field is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the fields created by the current in each individual loop.
6. What is a solenoid?
7. If the current is in the same direction in two coils, is the magnetic force between them an attracting force or a repelling force?
8. The current in two parallel straight wires is moving in opposite directions. Is the magnetic force between them an attracting force or a repelling force?