Section 4.1A The Core & 4.2 Convection Currents & the Mantle

1. What are the three types of heat transfer?
   1. 
   2. 
   3. 

2. Describe how convection currents form.

3. In general, what happens to the density of a fluid when it becomes hotter?

4. In a drafty house, why is air colder near the floor than near the ceiling?

5. Where in a convection cell is the densest material? Mark the diagram.

6. Where in a convection cell is the coolest material? Mark the diagram.

7. What happens to convection currents when a fluid reaches a constant temperature?

8. Why are there convection currents in Earth’s mantle? Explain.

9. What will happen to the flow of hot rock in Earth’s mantle if the planet’s core eventually cools down? Explain your answer.