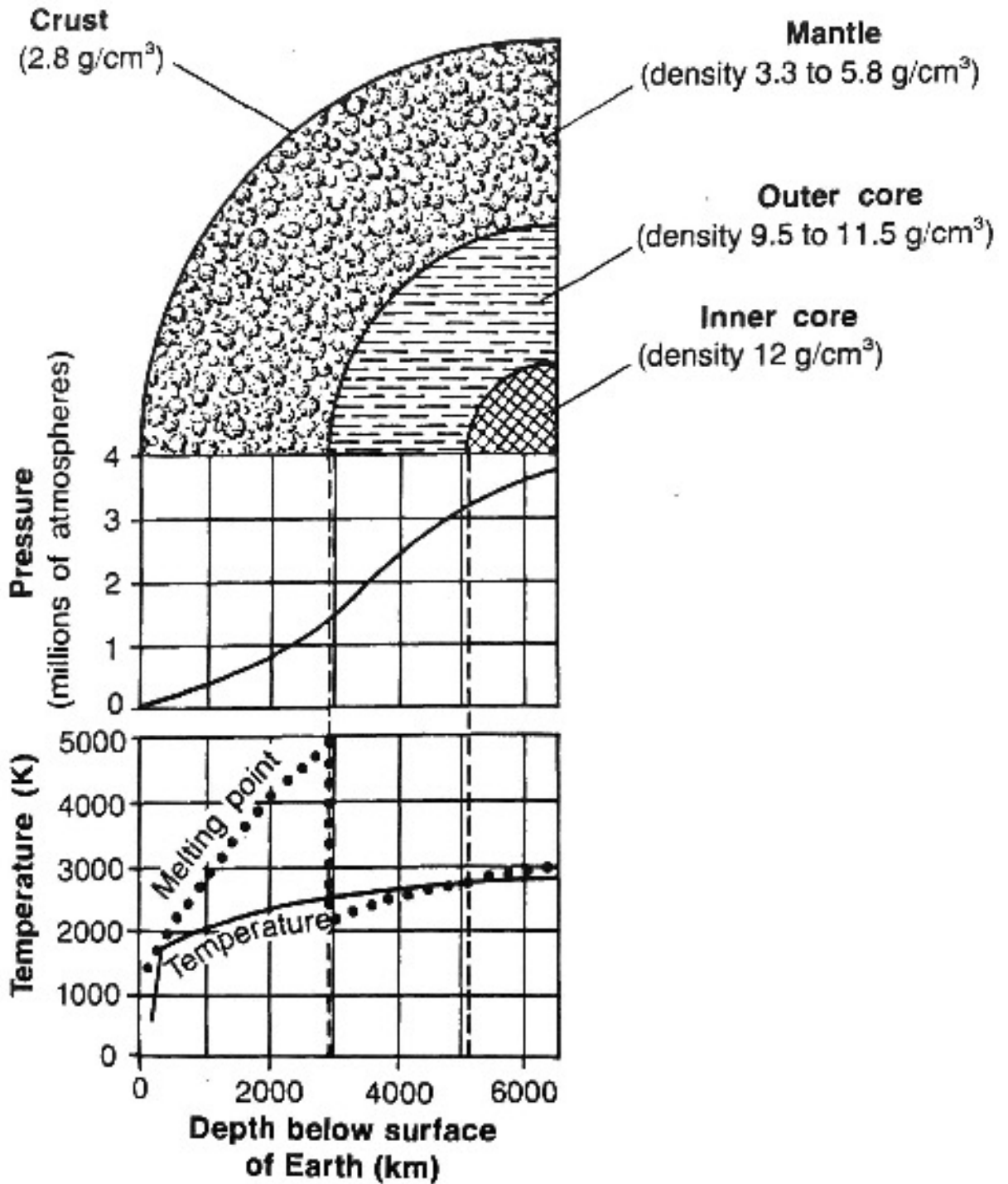


# The Earth's Interior

Scientists use earthquake waves to investigate the internal structure of the Earth in much the same way that a doctor uses X-rays to reveal information about the internal structure of a person.

The diagram summarizes information about the Earth's interior that has been inferred from the analysis of earthquake waves. Answer the following questions based on this diagram.



1. At what depth below the surface of the Earth does the outer core begin? \_\_\_\_\_
2. Approximately how thick is the outer core? \_\_\_\_\_
3. List the four layers of the Earth in order from the thickest to the thinnest layer?
  1. \_\_\_\_\_
  2. \_\_\_\_\_
  3. \_\_\_\_\_
  4. \_\_\_\_\_
4. What is the temperature of the interior of the Earth at a depth of 100 km? \_\_\_\_\_
5. At approximately what depth is the internal temperature of the Earth thought to be 2500K? \_\_\_\_\_
6. What information from the diagram supports the theory that the outer core of the Earth is in a liquid state?  
\_\_\_\_\_  
\_\_\_\_\_
7. What happens to the internal pressure of the Earth as depth below the surface increases? \_\_\_\_\_
8. What is the approximate density of crustal material? \_\_\_\_\_
9. Which layer of the Earth would you be most likely to find Earth material with a density of 4.5 g/cm<sup>3</sup>?  
\_\_\_\_\_
10. Which part of the Earth contains the densest material? \_\_\_\_\_
11. What is the relationship between the density of Earth materials and depth below the surface of the Earth?  
\_\_\_\_\_  
\_\_\_\_\_