

Heat Transfer Worksheet

1. Define Heat Transfer. (2 marks)

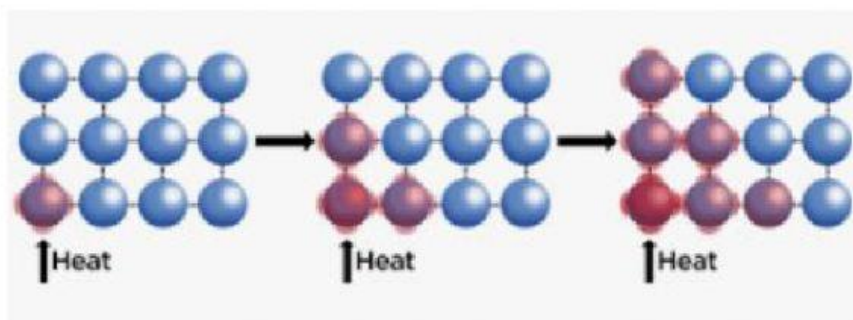
2. Distinguish among conduction, convection and radiation of heat energy. (3 marks)

Conduction

Convection

Radiation

3. a.

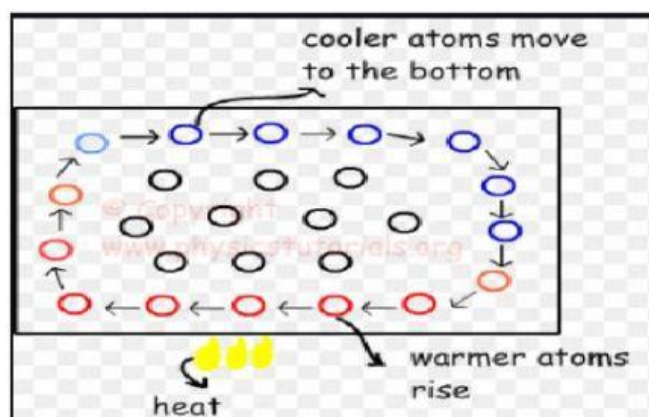


The diagram above, does it represent a solid, liquid or a gas? (1 mark)

Explain how heat is transferred in this object. (3 marks)

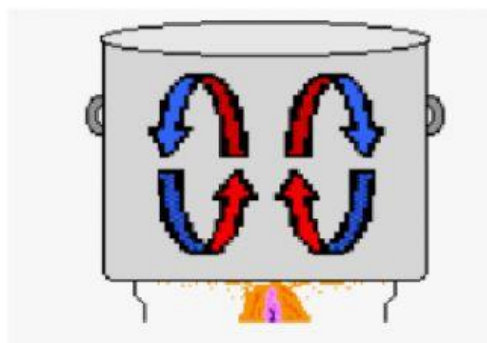
4. Explain why saucepans are much more common with plastic handles than metal handles. (3 marks)

5.



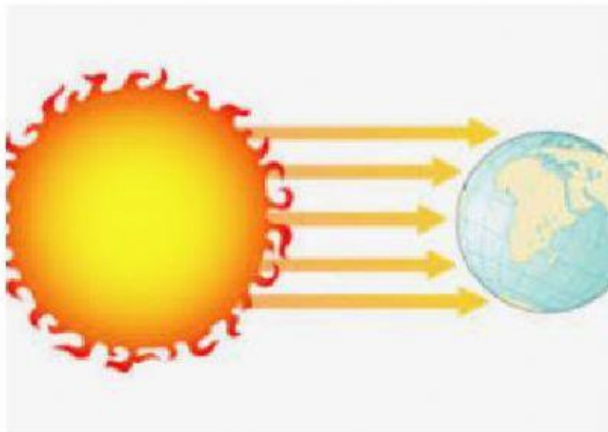
a. The diagram above is displaying _____ (1 mark)

b.



The diagram above is showing a pot of boiling water. Explain how the water is being heated up. (3 marks)

6. By which heat transfer method does the Sun heat up the Earth? (1 mark)



(b) Figure 6 shows a pot of water being heated on a flame.

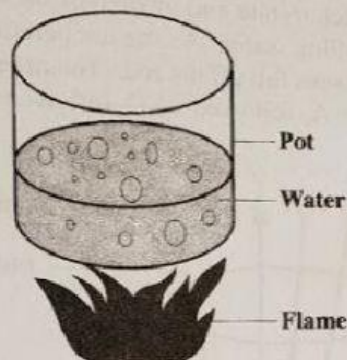


Figure 6. Diagram showing a pot of water being heated

Figure 6 shows a pot of water being heated on a flame.

By which method is heat energy transferred from the

(i) outside of the pot to the inside of the pot? (1 mark)

Give a reason for your answer

(2 marks)

(ii) bottom of the water to the top of the water?

(1 mark)

Give a reason for your answer

(2 marks)