YEAR 8 Physics Topic Test

Instructions:

Answer all questions

Show all your working where calculations are required. Total Marks: 10

Question 1 (2 marks)

For each of the following, state the primary method of heat transfer:

a) Heat from a bonfire warming your hands: _____
b) b) A metal spoon getting hot when left in a bowl of hot soup:
_____

Question 2 (3 marks)

Explain why a vacuum flask is designed with a vacuum between its inner and outer walls to keep drinks hot or cold. Refer to the methods of heat transfer in your answer.

Question 3 (2 marks)

Describe one practical application where understanding convection currents is important.

Question 4 (1 mark)

Which type of surface is the best absorber of thermal radiation?

Question 5 (2 marks)

A hot air balloon rises when the air inside it is heated. Explain this phenomenon in terms of heat transfer.