

TOPIC 6 THERMAL ENERGY

Name:		Date:	
		Class:	

EXERCISE 6.1: THERMAL TRANSFER

Marks:

20

Checked by:

Excellent

Good

Well done

Needs improvement

Very Good

Do correction

Section A: Choose the best answer. (5 marks)

1. Heat energy always moves from
 - A. Cold object to hot object
 - B. High temperature to low temperature
 - C. Equal temperature objects
 - D. Small object to large object

2. Which method transfers heat through particle vibrations in solids?

- A. Radiation
- B. Convection
- C. Conduction
- D. Reflection

3. Convection happens mainly in:

- A. Solids only
- B. Liquids and gases
- C. Metals only
- D. Vacuum

4. Heat from the Sun reaches Earth mainly by:

- A. Conduction
- B. Convection
- C. Radiation
- D. Evaporation

5. Which situation is an example of radiation?

- A. Heating a metal spoon
- B. Boiling soup
- C. Feeling warmth from a candle
- D. Stirring hot tea

Section B: Answer ALL of the questions. (15 marks)

6. Complete the sentences using the words below. [6]

conduction, convection, radiation, hotter, colder, infrared

- a) Heat moves from a _____ object to a colder object.
- b) Heat transfer through solids by particle vibrations is called _____.
- c) Heat transfer in liquids and gases by movement of particles is called _____.
- d) Heat transfer by waves is called _____.
- e) Radiation uses _____ waves.
- f) Heat moves towards the _____ region.

7. Define

- a. conduction. _____
_____ [1]
- b. convection. _____
_____ [1]
- c. radiation. _____
_____ [1]

8. Two spoons are placed in a cup of hot tea.

Spoon A: Metal spoon



Spoon B: Wooden spoon

a) Which spoon will feel hotter after 5 minutes? [1]

_____ b)

Explain why. [1]

c) Predict what would happen if both spoons were left for a longer time. [1]

9. Summary: Complete the image. [3]

