



Name: _____ Sec: _____ Date: _____

Q1. Circle the correct answer.

1. Temperature is measured in
 - A. Degree Celsius
 - B. Kilograms
 - C. Meters
 - D. Liters

2. A thermal insulator is
 - A. A type of kettle
 - B. Something that lets heat go through it easily.
 - C. Something that does not let heat go through it easily.
 - D. Something used to control temperature.

3. Our normal body temperature is
 - A. 38⁰ C
 - B. 37⁰ C
 - C. 40⁰ C
 - D. 36⁰ C

4. When you heat up things they
 - A. Contract
 - B. Expand
 - C. Remain same
 - D. Deflate

5. Heat always flows from
 - A. Hotter things to hotter things
 - B. Hotter things to colder things
 - C. Colder things to colder things
 - D. Colder things to hotter things

6. What do we call materials that let heat pass through them easily?
 - A. Thermal conductors
 - B. Thermal insulators
 - C. Electrical conductors
 - D. Electrical insulators

7. Which of these is a good thermal conductor?
 - A. Plastic
 - B. Wood
 - C. Steel
 - D. Rubber

8. What do we call materials that do NOT let heat pass through them easily?
 - A. Thermal conductors
 - B. Thermal insulators
 - C. Electrical insulators
 - D. Electrical conductor

9. Which of these is a good thermal insulator?
 - A. Steel
 - B. Iron
 - C. Polystyrene
 - D. metal

10. To save on heating bills, what should the roof of a building be lined with?
 - A. Thermal conductor
 - B. Thermal insulator
 - C. Nothing
 - D. Electrical insulator

11. A room at a temperature of 20 degrees Celsius would feel colder than a room at a temperature of -20 degrees Celsius.
 - A. True
 - B. False
 - C. They would both feel equally cold
 - D. They would both feel equally hot

12. How does heat travel?

- A. From cold things to hotter things
- B. From hot things to colder things
- C. Between things of the same temperature
- D. From low temperature to high temperature

Q2. State whether true or false. If it is false then give reason.

1) All things heat up or cool down until they are at the same temperature. ()

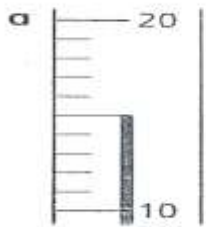
2) Normal room temperature is 37⁰ C. ()

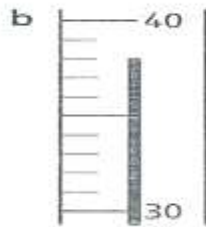
3) Plastic is a thermal insulator. ()

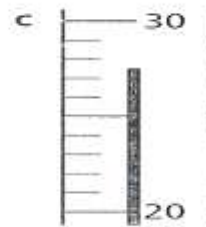
4) When the liquid is heated it contracts. ()

5) Temperature change can be measured by temperature sensors. ()

Q3. What temperatures are shown in this thermometer?







Q4. Match the following.

1. Galileo	How hot or cold something is
2. Thermal conductors	Unit for temperature
3. Thermometers	First thermometer

4. Degree Celsius	Used to measure temperature
5. Temperature	Allows heat to pass through it

Q5. Bilal was doing an investigation to see which covering is best to stop hot water from getting cold.

a. Arrange the material from the coldest to hottest.

Plastic	Paper	Tissue	Foam rubber
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b. Define the term Insulation.

Q6. Sana and Nadia were watching T.V when their mother called them for their ice-cream and tea. When their mother called?

a) What do you think was the temperature of ice-cream and tea?

Tea _____ Ice-cream _____

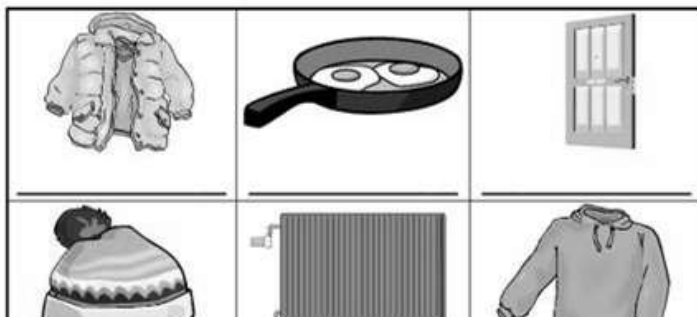
b) However, they went after half an hour and were not happy when they reached the table.

Why?

c) What was the temperature of tea and ice cream when they reached table.

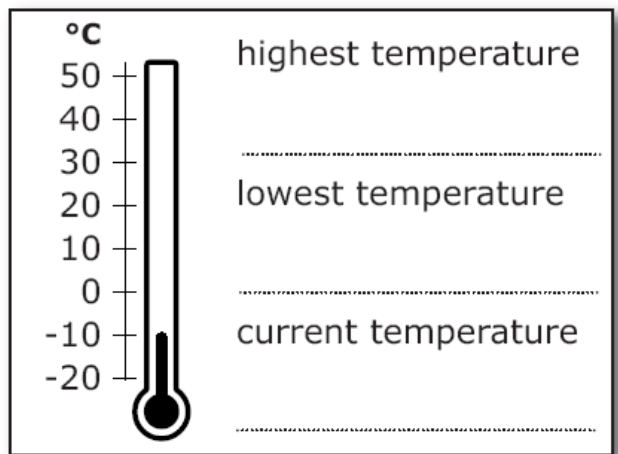
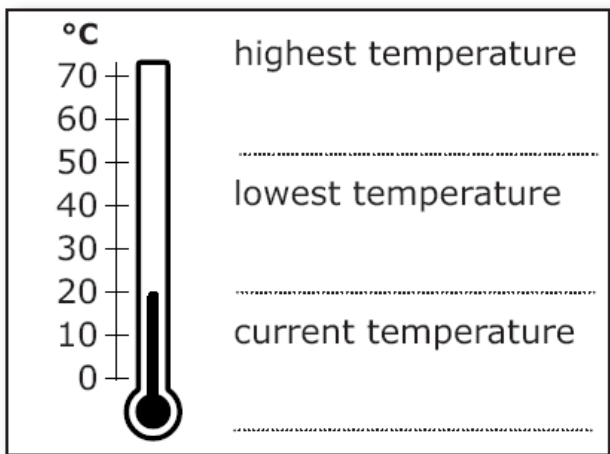
Tea _____ Ice-cream _____

Q7. Look at the pictures below. Write 'insulator' and 'conductor' in the space provided for the materials in the picture.

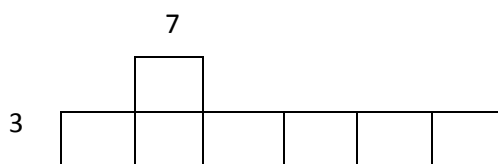


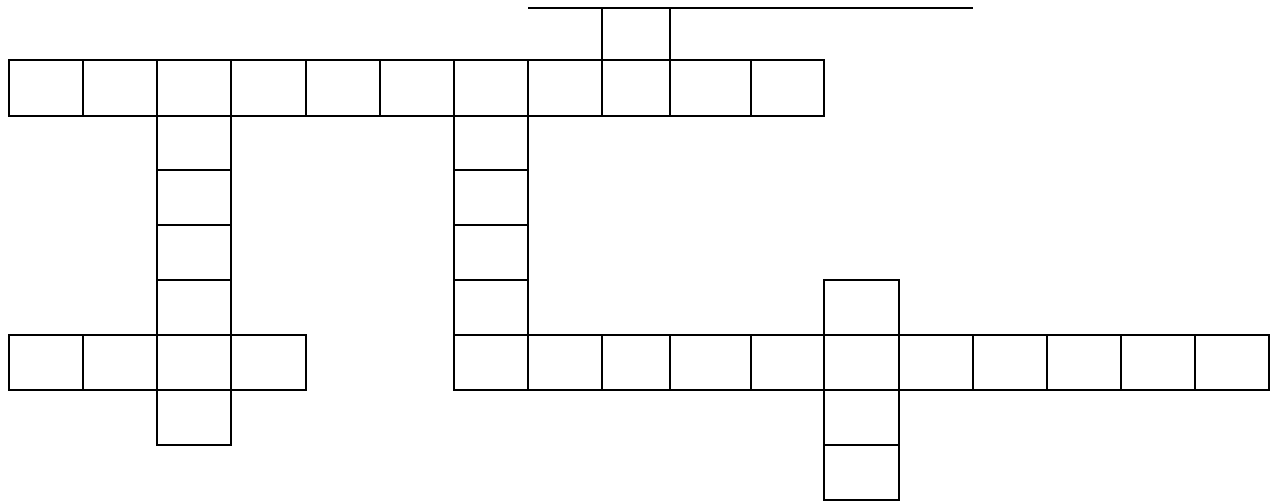
Q8. Look carefully at each thermometer. For each one, write

- a. the highest temperature it can read
- b. the lowest temperature it can read
- c. the temperature it is currently showing.



Q9. Solve the puzzle with following hints.





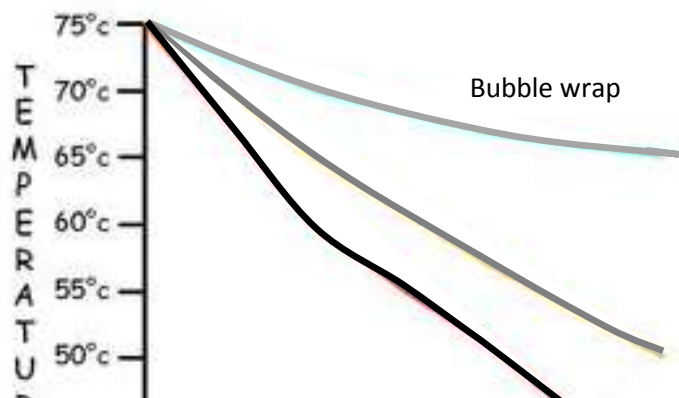
Across:

1. An instrument used to measure temperature.
2. The temperature of our _____ 37°C.
3. The units for temperature are _____ celcius (°C)
4. Things heat up or cool down until they have temperature as their _____.

Down:

5. When something gets bigger it _____
6. _____ are good thermal conductors.
7. Thermal conductors allow _____ to go through it easily
8. The rounded end at the bottom of a thermometer.

Q10a. Below is a graph showing the results of class 4's hot chocolate insulators experiment.



Tin foil



Brown paper

1. Which insulator worked the best? _____
2. What was the temperature of hot chocolate wrapped in bubble wrap after 30 minutes? _____
3. Which insulator was least effective? _____
4. What was the temperature of hot chocolate wrapped in tin foil after 30 minutes?

5. What was the temperature of hot chocolate wrapped in brown paper after 30 minutes? _____

b. What happens to liquid inside the thermometer when it is kept in hot and cold water?
