

Name: Point:/30

MINI-TEST UNIT 2.

MATERIALS: PROPERTIES AND CHANGES

Question 1. Alex planed a test to compare boiling points of four substances: pure water, vinegar, cooking oil and ethanol

a. Circle the correct answer

i) In this test, the boiling points of different substances is

control variable dependent variable independent variable

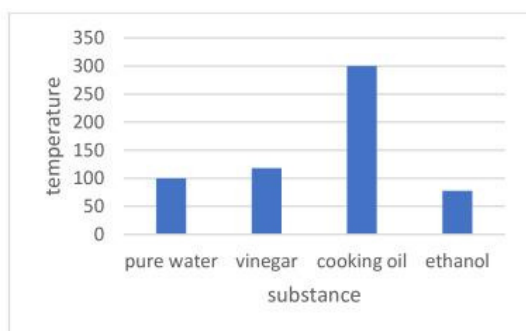
[1]

ii) Choose two materials and equipment will Alex need

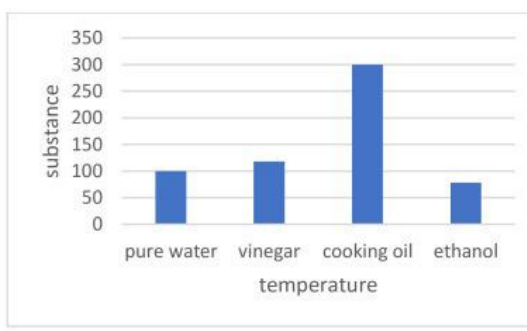
thermometer cylinder force meter rod

[1]

iii) This is his result: Pure water boils at 100 °C, vinegar boils at 118 °C and cooking oil boils at 300 °C, ethanol boils at 78°C. Choose the correct bar graph showing this result

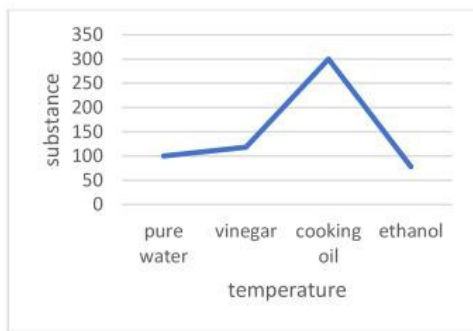


A

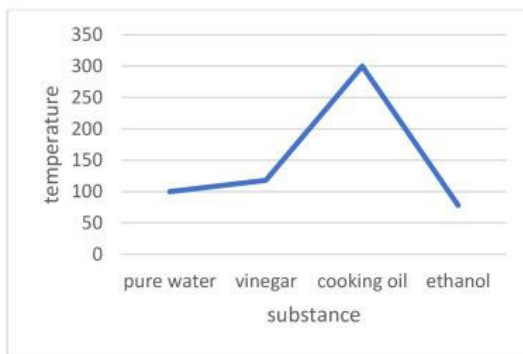


B

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C



D

[1]

iv) If Alex boils put these four substances with 90°C, which substances can boil?

Pure water ethanol vinegar cooking oil

[1]

Explain your choice

.....[1]

b. Explain why different substance boil at different temperatures.

.....[1]

Question 2. Tick the characteristics of boiling but not evaporation

- a. Happen at any temperature
- b. Happen only at boiling point
- c. Has bubbles
- d. Occurs throughout the liquid
- e. Occurs only on the surface of the liquid
- f. Particles escape the surface of the liquid at all directions
- g. Particles escape the surface of the liquid at one direction upward

[4]

Question 3.

a. Explain why the pot is made from metal

.....
.....[1]

b. Explain why the handles of pot is made from plastic

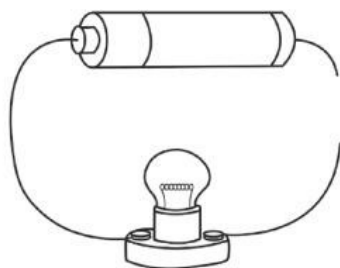
.....
.....[1]

c. Suggest one other material for making the handles.

.....[1]



Question 4. Kim Khanh set up a circuit, but the wire is broken. She touches the free ends of the wire to a rod.



a. Suggest suitable material using for making the rod

.....[1]

b. Explain your choice in part a.

.....
.....[1]

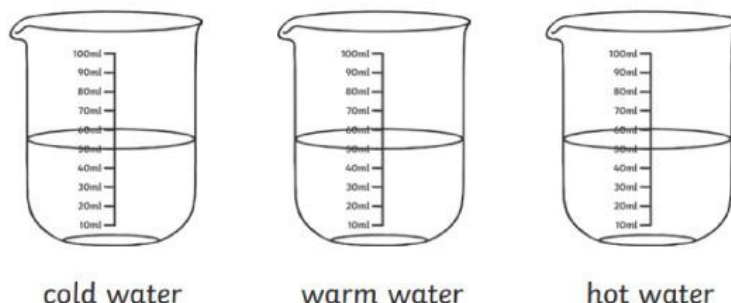
Question 5. Tick ALL irreversible changes

- a. melting chocolate in a hot pan
- b. frying an egg
- c. dissolving sugar in water
- d. burning matchsticks on a fire
- e. rusting on a pan

[3]

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Question 6. Ms Nga put 3 spoonfuls of sugar in a jar of cold/warm/hot water and time how long it takes to dissolve. Carry out 3 tests, one for each temperature and time how long it takes for the sugar to dissolve.



a. Which temperature water do you think will dissolve the sugar fastest?

.....[1]

b. This is the result of the test

Time (second)	Cold water	Warm water	Hot water
Measure 1	64	35	26
Measure 2	72	39	19
Measure 3	68	43	21
Average	68	39	22

b. In which condition, sugar dissolved fastest?

Cold water warm water hot water

[1]

c. In which condition, sugar dissolved slowest?

Cold water warm water hot water

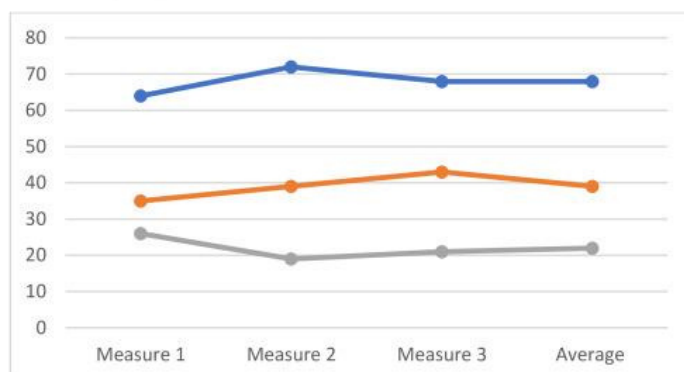
[1]

d. Why Ms Nga measured time in three times and calculated the average?

.....
[1]

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e. Ms Nga drew a line graph the show the result



State TWO incorrect points in this graph.

The first incorrect is[1]

The second incorrect is[1]

Question 7. When we mix vinegar and baking soda, we can see bubbles of carbon dioxide.

a. Is this a chemical change or physical change? Explain your answer

This is a change [1]

Because

..... [1]

b. Name the reactants in this change

..... [2]

c. Name the product in this change

..... [1]

d. State the evidence of this change

..... [1]

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