Schedule
exam
Exams
FINALS WEEK
JAPANESE
U P S R
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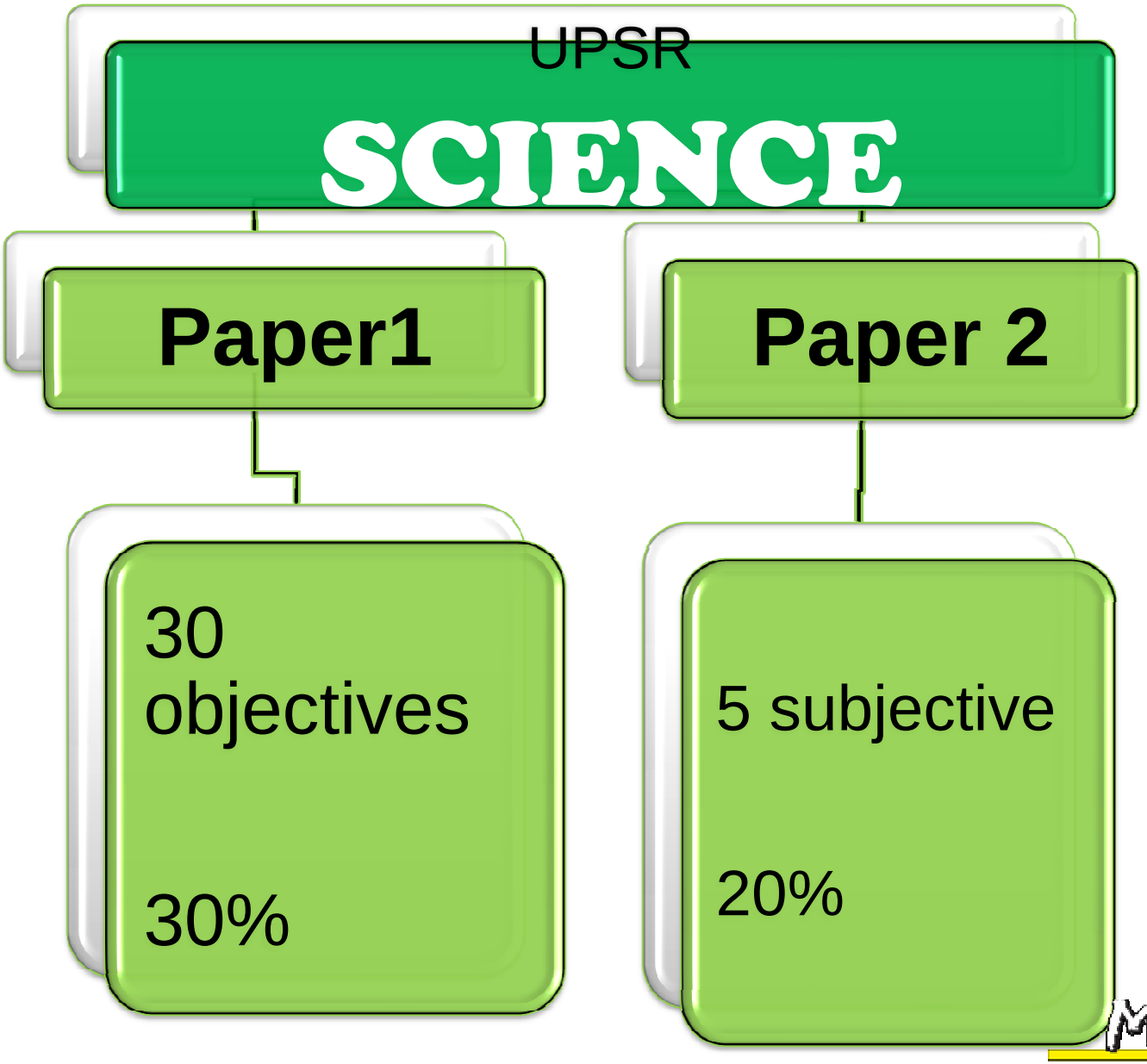

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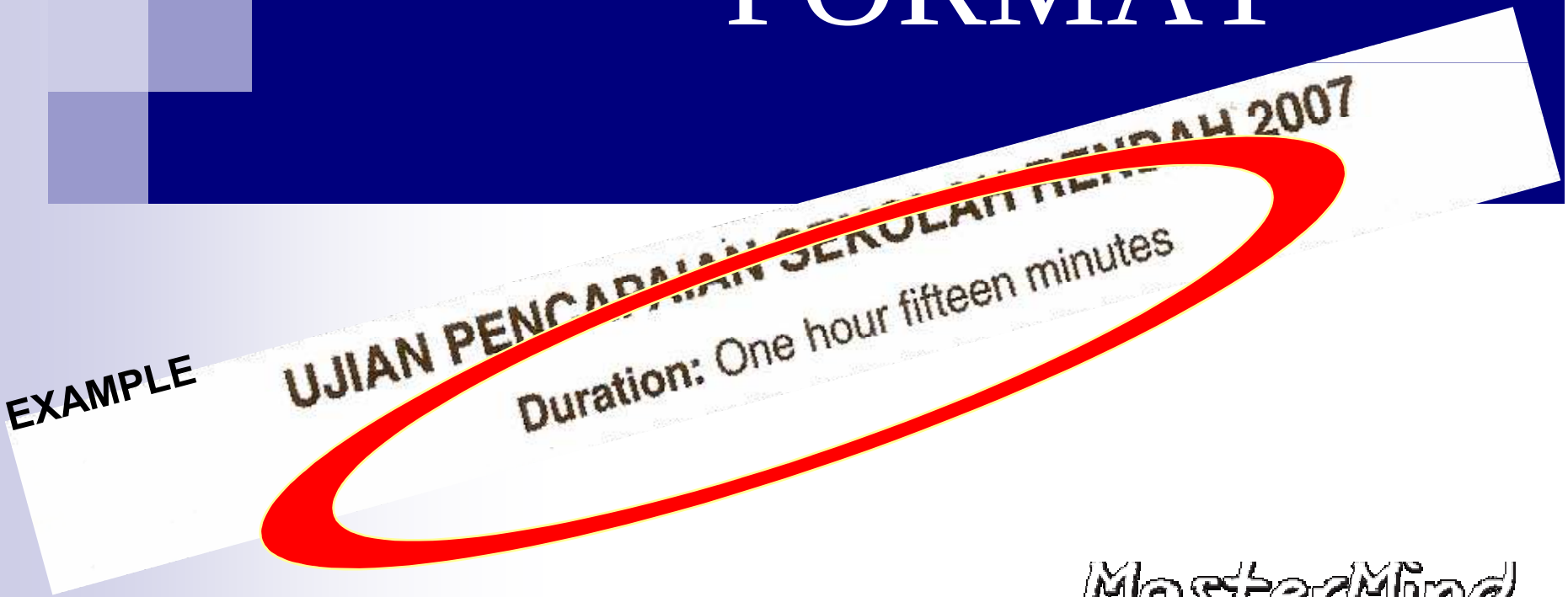
FORMAT

EXAMPLE



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SECTION A

- 30 Marks for 30 questions
- 45 minutes recommended

SECTION B

- 20 Marks for 5 questions
- Each question got 4 to 5 subquestions
- 30 minutes recommended

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SECTION A

(objective)

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During exams…..

- If you unable to answer a question, proceeds to the next question.
- Choose the best answer.
- Check if there is any questions that have missed out

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2007

Diagram 1 shows a situation.

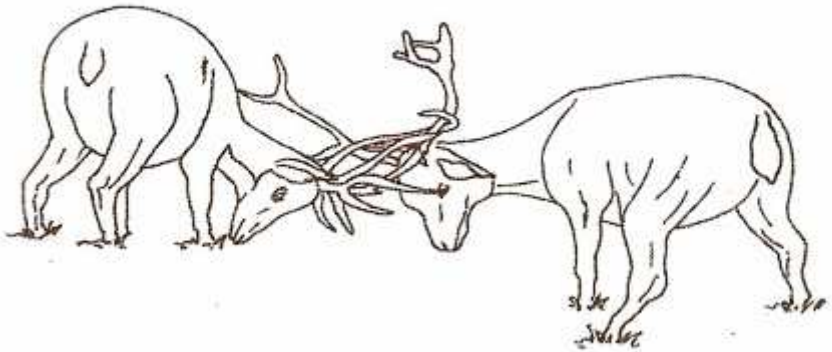

Diagram 1

What is presented in the situation?

A Shortage of food

B Competition between living things

C Destruction of animal habitat

D Number of animals decreasing

Analysis the Diagram

↓

Straight forward question

↓

Choose the most suitable answer

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2007

3 Diagram 3 shows an object made from a particular plant material.

Diagram 3

If there is a massive increase in the production of this object, how will the plant be affected?

A Extinction of the plant
B Recycling of the plant material increases
C Higher rate of the plant reproduction
D Production of more other objects using the plant materials

Analysis the Diagram

↓

What is the question?

↓

Choose the reasonable answer

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2006

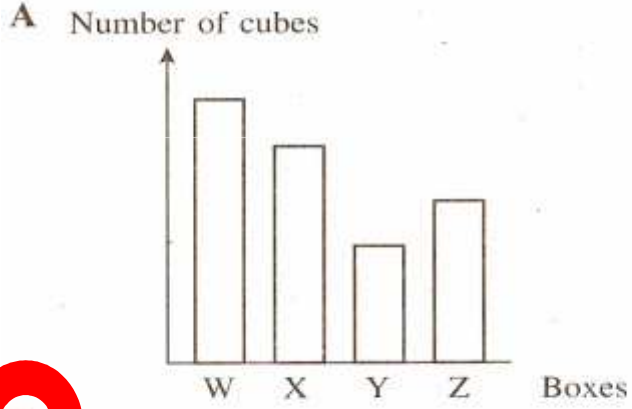
The following information compares the number of cubes which can be filled into boxes W, X, Y and Z.

All cubes are the same size.

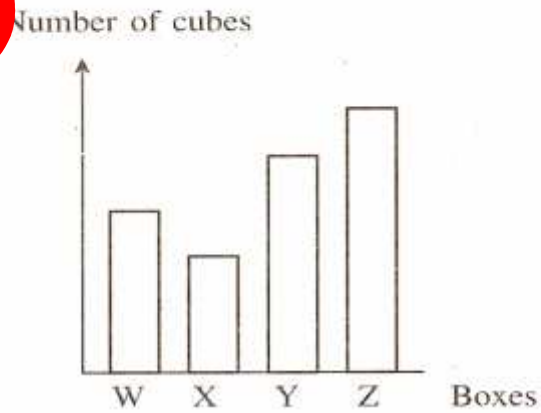
- W can be filled up with more cubes than X
- Y can be filled up with more cubes than W but less than Z

Which of the following bar charts represents the information?

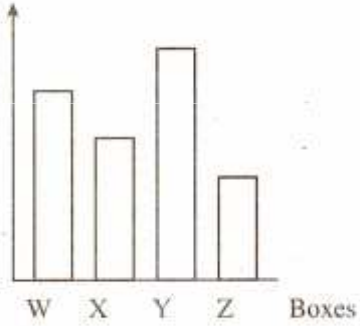
A



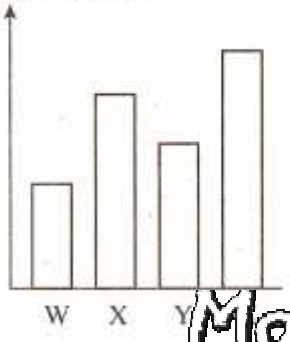
B



C



D



Read the question

↓

Understand the information

↓

Choose the most suitable answer

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2005

Which of the following electrical appliances use the heating effect?

P

Q

R

S

A P and Q

B R and S

C P, R and S

D Q, R and S

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2005

Leena's mother ran out of vinegar while cooking? Which of the following could she use to replace the vinegar for her cooking?

A

C

B

D

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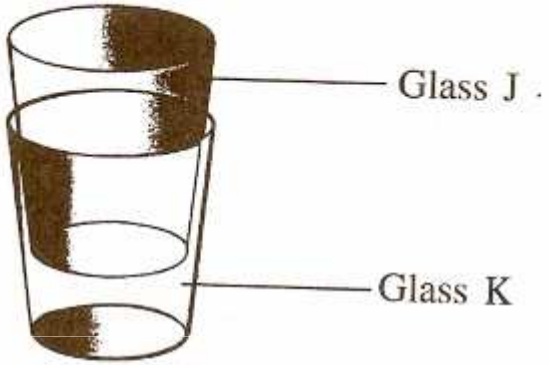
2005

The picture shows two glasses that are stuck together.



A student wants to separate the two glasses.
Which of the following should he do?

A Heat glass K first
B Heat glass J first
C Glass K is soaked in cold water
D Glass J and K are heated together

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SECTION B

(subjective)

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SECTION B – STRUCTURED QUESTIONS

1. Be able to interpret diagrams, photographs, tables and graphs to relate to scientific concepts or principles.

2. Give short and concise answers with special attention to keywords.

3. Underline important information given in a question.

4. Identify the variables involved and their relationships to form inference and hypothesis.

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- STEP:
  1. Read the Question
  2. Study the graph/table/diagram
  3. Underline important information
  4. Read the subquestions
  5. Use ‘Formulae’
- If you unable to answer a question, proceeds to the next question.
- Answer all the questions

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➢ TYPE OF QUESTION

1. Aim of experiments

   - To investigate the relationship between *manipulated variable* and *responding variable*

2. Hypothesis/ The relationship between variables

   -**A** is increasing/decreasing when **B** is increasing/decreasing

   -The more the **A**, the less the **B**

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3. Manipulated/ what to change?

-Graph/Table/Questions

4. Fixed/constant variable/controlled variable

-Variables that kept constant during the experiments.

-Can be anything ; as long as it is reasonable

5. Responding/measured variable/changing

6. Observation

-What do you see in the experiment

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7. Conclusion

- Sometimes hypothesis can be taken as conclusion
- Summary of the graph or table given

8. Inference

-Why is that happen? *Because*

9. Trend

-Increasing/ decreasing/ constant/ no changes

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EXAMPLE

Table I shows the average rate of heartbeats of four group of pupils after doing the following activities.

Group	Activity	Average rate of heartbeats (per minute)
W	Walking	68
X	Jumping	78
Y	Running	82
Z	Swimming	88

Table I

(a) What is the aim of the investigation?

To investigate the relationship between the average heartbeat rates and the type of activities carried out

(1 mark)

(b) In this investigation, identify what is

(i) changed: **Type of activity**

(ii) measured: **Average rate of heartbeats**

(iii) kept the same: The age of pupil…etc

(3 marks)

(c) Describe the trend in the change of the heartbeat rates.

Increasing

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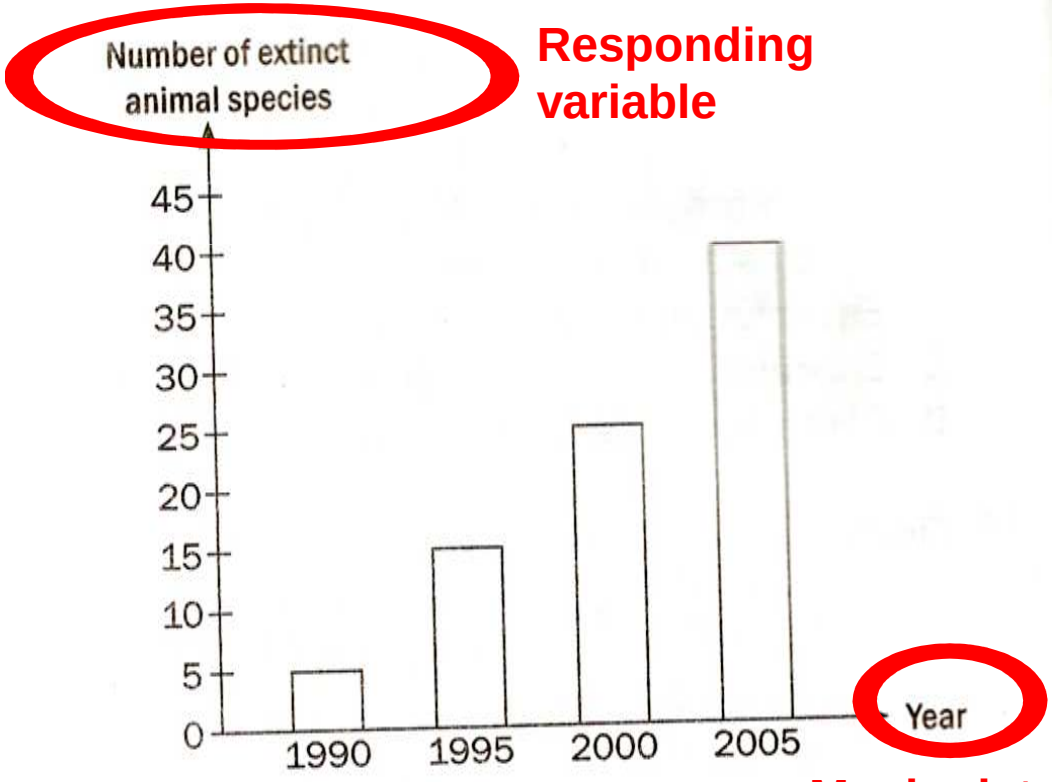
EXAMPLE

A group of pupils carried out an investigation about the extinction of an animal species in a forest. The bar chart in Figure 3 shows the result of the investigation.



Responding variable

Manipulated variable

Figure 3

Figure 3

a) What is the aim of the investigation?

To investigate the relationship between the number of extinct animal species and the period of time

b) What is the trend shown by the number of extinct animal species?

Increasing

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EXAMPLE

A group of pupils carried out an investigation about the extinction of an animal species in a forest. The bar chart in Figure 3 shows the result of the investigation.

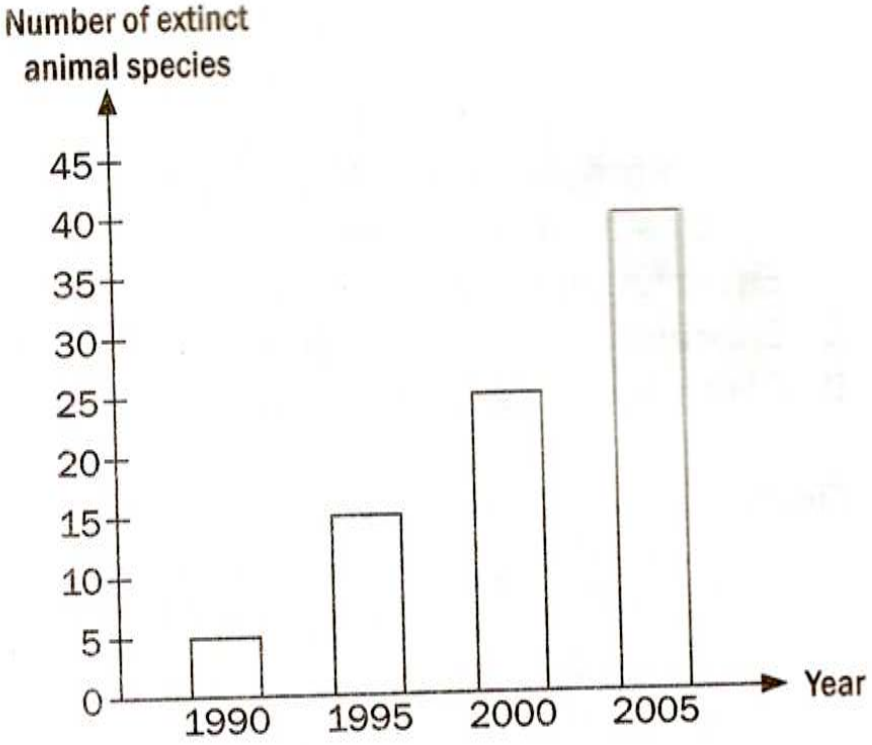

Figure 3

c) State **one** inference to explain why the number of extinct animals in year 2005 is the highest.

Habitats of animals species decreases

d) Give **one** reason to support your inference in c).

Habitats of animals species is used for developing projects

e) What conclusion can you make based on the result in Figure 3?

The number of extinct animal species increases year by year due to developing projects

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2006

When eight tissue papers are moistened, their total weight is 200 g. The tissue papers are put to dry and their weights are recorded every hour. The result of the investigation is recorded in the table below.

Time	Total weight of eight tissue paper/g
1 hour	180
2 hours	160
3 hours	135
4 hours	110

(a) What is the aim of the investigation?

To investigate the relationship between the time and the total weight of water being evaporated

[1 *mark*]

(b) What is the trend of change in the total weight of the tissue papers during the investigation?

Decreasing

[1 *mark*]

(c) Suggest **one** hyphothesis based on the trend stated in **4**(b).

The longer the time, the more water/mositure is being evaporated.

[1 *mark*]

(d) State **one** inference about the total weight change of the tissue papers during the investigation.

Water has evaporated from the wet tissues

[1 *mark*]

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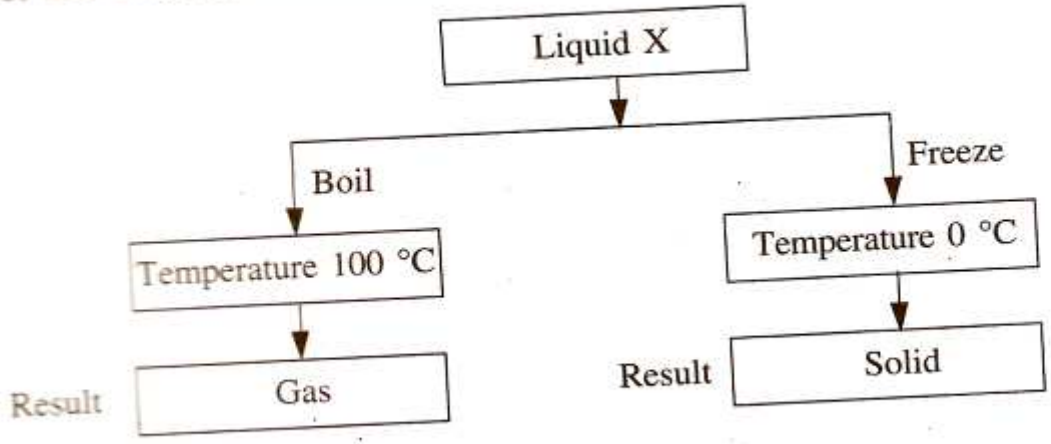
2007

Fendi investigates the change of state of liquid X.
The result of this investigation is shown in the flow chart below.



(a) State **one** manipulated variable.

Temperature [1 *mark*]

(b) Once liquid X is boiling, predict what will happen to its temperature if heating continues.

Nothing happen [1 *mark*]

(c) Using the result of this investigation, state **one** inference about liquid X.

Liquid X is a water [1 *mark*]

(d) State **one** observation to support the inference in **3**(*c*).

Liquid X boil at 100^{0}C to form gas and freeze at 0^{0}C [1 *mark*]

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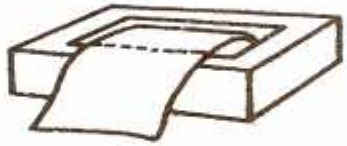
2005

Adam carries out an investigation to study the ability of different objects absorbing water.

He puts the objects in four beakers.

Each beakers is the same size and contain the same volume of water.

He records the time taken by the objects to absorb water.

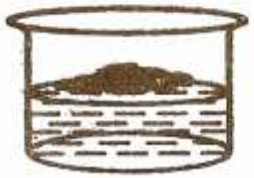


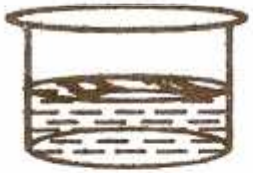
Tissue paper

Cotton

Hand towel

Sponge





These are Adam's results:

Type of object	Tissue paper	Cotton	Hand towel	Sponge
Time taken to absorb/second	5	15	23	

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These are Adam's results:

Type of object	Tissue paper	Cotton	Hand towel	Sponge
Time taken to absorb/second	5	15	23	40

(a) Using Adam's results, state the following variable:

1. Manipulated variable : Type of object

2. Responding variable : Time taken to absorb water

[2 *marks*]

(b) Using Adam's results, what is the relationship between the manipulated variable and the responding variable in (a)?

Different type of object absorb water at different rate.

[1 *mark*]

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(c) Using Adam's results, what is the trend of the time taken by the objects to absorb water?

Increasing

[1 *mark*]

(d) Why do you think that the times taken for the various objects to absorb water were different?

Give **one** reason.

Objects that made of different material have different ability of absorbing water

[1 *mark*]

(e) Adam continues the investigation using a piece of plastic.

Predict the ability of the plastic to absorb water.

Plastic do not absorb water

[1 *mark*]

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SPOT Q’s ZONE

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EXAMPLE

A group of pupils carried out an experiment to investigate the speed of a moving object as shown in Figure 2.

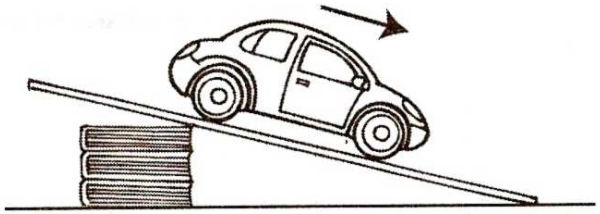

Figure 2

They allowed the toy car roll down from the highest point of the ramp. The experiment was repeated on three different surfaces. Table 2 shows the results of this experiment.

Surface of the ramp	*A*	*B*	*C*
Time taken (s)	5	16	12

Table 2

a) What is the aim of the experiment? [1 *mark*]

To investigate the relationship between the type surface of ramp and the speed of a moving obje

b) Which surface could be mirror and sandpaper, if surface *C* is wood? [2 *marks*]

i) Mirror:

A

ii) Sandpaper:

B

c) State **one** controlled variable in this experiment. [1 *mark*]

The shop of the ramp/ weight of the toy car

d) What conclusion can be made from the experiment? [1 *mark*]

The smoother the surface; the faster the object can move on the surface

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EXAMPLE

Diagram 2 shows the difference between the brightness of bulb T and the brightness of bulb S.

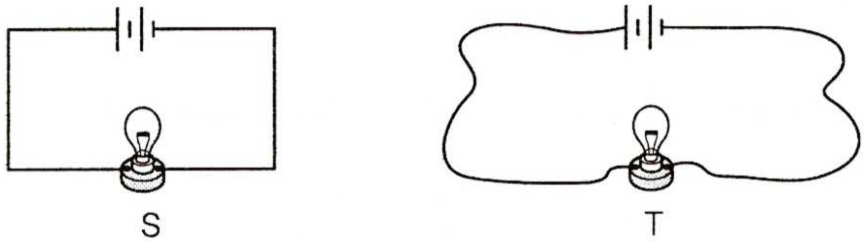

Diagram 2

(a) Compare the difference between the brightness of bulbs S and T.

(i) S: Bright (ii) T: Dim

(2 marks)

(b) Explain your answer in (a).

The length of wire affect the amount of electricity the bulb gets

(1 mark)

(c) For the investigation above, state what is

(i) changed: The length of the wire

(ii) observed: The brightness of the bulb

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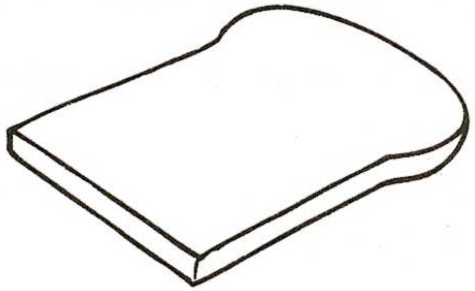
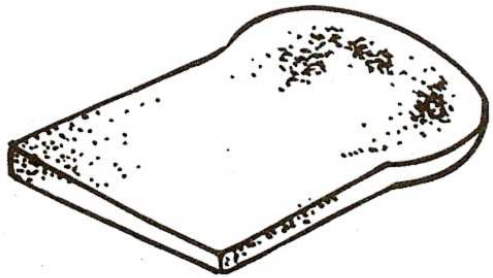
EXAMPLE

Figure 3 shows the conditions of a piece of bread on the first and fifth day.



(a) Observation on the first day



(b) Observation on the fifth day

Figure 3

a) State **one** inference based on your observations in Figure 3(a) and 3(b).

The bread becomes spoil on th e fifth day because of the growth of fungi on the bread

b) State **one** hypothesis that can be made in the experiment.

Food/ bread is spoiled due to the growth of the fungi

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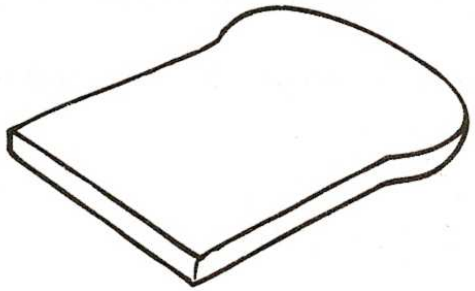
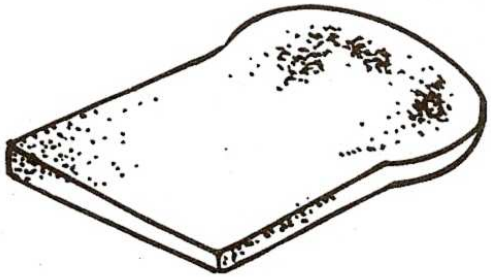
CONT…

Figure 3 shows the conditions of a piece of bread on the first and fifth day.



(a) Observation on the first day



(b) Observation on the fifth day

Figure 3

c) Based on the investigation,

i) what is the controlled variable?

Size of bread/ type of bread

ii) what is the responding variable?

Growth of fungi

d) Suggest **one** way to preserve the bread in order to preserve it from being spoiled.

Cooling method - keep the bread in the refrigerator.

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Conclusion

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- Don’t leave the question blank
- Read the question properly
- Don’t panic; follow the steps

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Positive thinking will let you do everything better than negative thinking will.

Zig Ziglar

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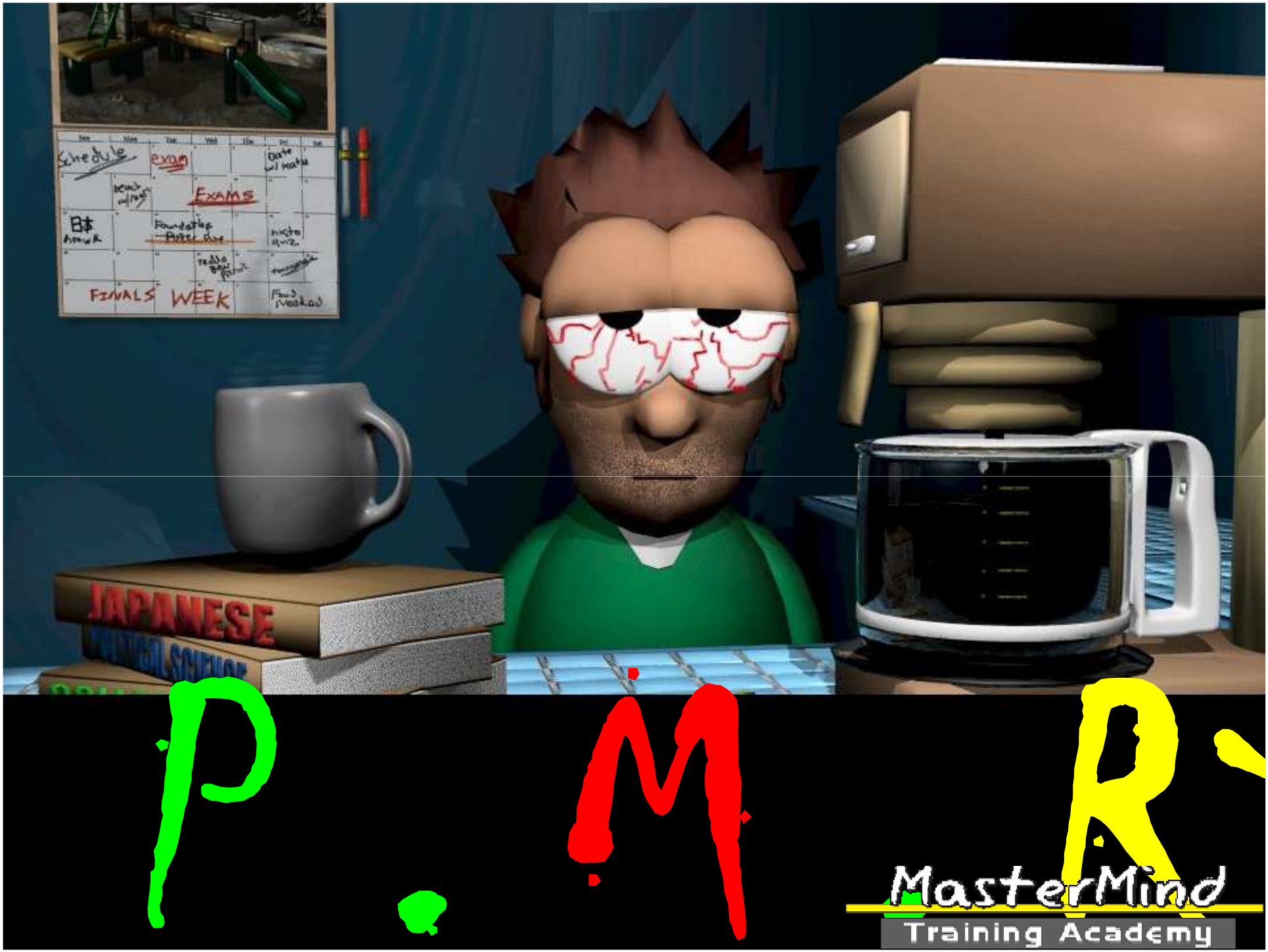
Schedule
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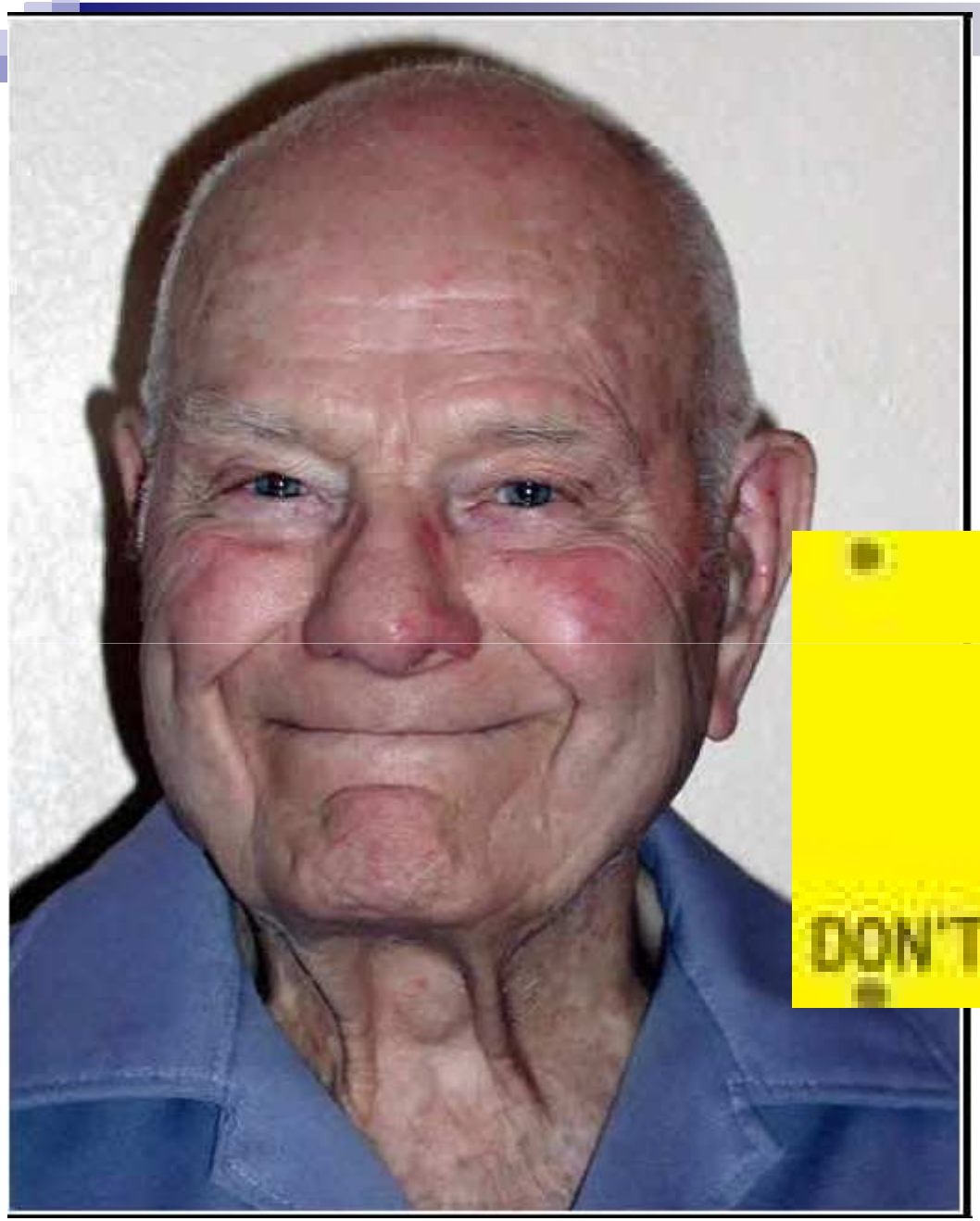

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Latest Format of the PMR Science KBSM

Paper	Time	Type of question		Total questions	No of questions needed to be answered	Total Marks
1	1 hour	Objective		40	40	40
2	1 ½ hour	Subjective	Section A	6	6	40
			Section B	2	2	20

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PAPER 1

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SCIENCE Paper I I hour

DO NOT OPEN THE QUESTION PAPER UNTIL YOU ARE TOLD TO DO SO

- This paper is bilingual.
- Question in English are followed by translation in Bahasa Melayu.
- Candidate is required to read the information on page 2

Kertas soalan ini mengandungi 22 halaman bercetak dan 2 halaman tidak bercetak

[Lihat sebelah]

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INFORMATION FOR CANDIDATES

1. This questions are consists of **40 questions**. Answer all questions.

2. Each question is followed by four alternative answers A , B. C or D. For each question's **choose one answer only**. Blacken your answer on the objective answer sheet provided.

3. Blacken only one space for each question'

4. If you wish to cancel our answer erase the blackened mark that you have made. Then blacken the space for your new answer.

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INFORMATION FOR CANDIDATES (cont)

5. The **diagrams in questions not drawn to scale unless stated**.

6. You **may use a non-programmable scientific calculator**.

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MELAKA Trial 2008 Q22

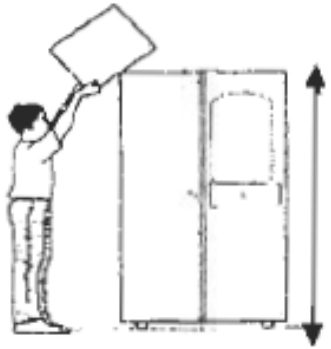

Diagram 12
(Rajah 12)

The above diagram 12 shows a man lifts his box with a force of 50N,The height of cabinet is 2.5m.
(Rajah 12 di atas menunjukkan seorang lelaki mengangkat kotak dengan menggunakan daya sebanyak 50N, setinggi 2.5m)

What is the work done by the man?
(Apakah kerja yang dilakukan oleh lelaki ini?)

A. 1.25N B.12.5N C.125N D.1250N

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PERAK Trial 2008 Q1

Which of the following is the *S.I.* unit for mass and weight?
Antara berikut, yang manakah merupakan unit S.I. untuk jisim and berat?

	Mass *Jisim*	Weight *Berat*
A	*N*	kg
B	*S*	km
C	*kg*	N
D	N	S

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Standardized Test-Taking Tips

PAPER 1

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Proper test-taking skills can help you Avoid careless errors and insure a higher score.

1. **Read the question slowly**, being sure to focus on the last sentence which will usually contain the actual question.

2. **Read the choices carefully.**

3. **Re-read the question** while keeping the choices in mind. This will assist you in disregarding extraneous information.

4. First **eliminate choices and the choose the answer** that you believe is correct. If you are unsure between two choices, mark the question for review.

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Things to avoid:

- **After completing the first half of the exam, return to those questions you marked for review.**

*!!!!**DO NOT change answers unless in re-reading the question** you realized you had missed key information the first time.*

Speed: If you read too fast, you will miss key words such as all, every, best, worst, least or most.

Lack of concentration: Being alert is the key to success. Be sure that you are well rested for your exam

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Quotes from the Exam Room

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PAPER 2

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INFORMATION FOR CANDIDATES

1. This question paper consists of 2 sections: **Section A** and **Section B**

2. Write your answers in the spaces provided in the question paper .

3. **Show your working**, it may help you to get marks.

4. If you wish to cancel any answer, neatly cross out the answer.

5. The **diagrams in the questions provided are not drawn to scale unless stated**.

INFORMATION FOR CANDIDATES

6. Marks allocated for each question or part question are shown in brackets.

7. The time suggested to complete **Section A** is 60 minutes and **Section B** is 30 minutes.

8. You may use a **non-programmable** scientific calculator.

9. Hand in all your answer sheets at the end of the examination

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Standardized Test-Taking Tips

PAPER 2

MasterMind Training Academy

Proper test-taking skills can help you Avoid careless errors and insure a higher score.

1. GUESS if u really don't know. **NEVER LEAVE ANY QUESTION BLANK** and try the luck of your wild guesses.

2. If you feel that you are behind the clock, shorten the answer, or mention only the relevant points.
   In paper 2, it is essential that you answer the required number of questions. What counts ultimately is the total score, and not the score gained for any particular question.

3. Take a watch to the test and keep track of the time.

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Proper test-taking skills (cont)

3. If you get completely stuck on a problem, go on to the next one. Everyone else probably had trouble, too.

4. Ask questions. If you're the slightest bit confused, ask the instructor to clarify what the question means.
   Students routinely misinterpret problems because they are unwilling to bother the instructor. This is no time to be shy.

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PAHANG Trial 2008 Q6(f)

Diagram 6.4 shows the reading on the ammeter when the voltage is 0.6 V

Rajah 6.4 menunjukkan bacaan ammeter apabila bacaan voltan 0.6V

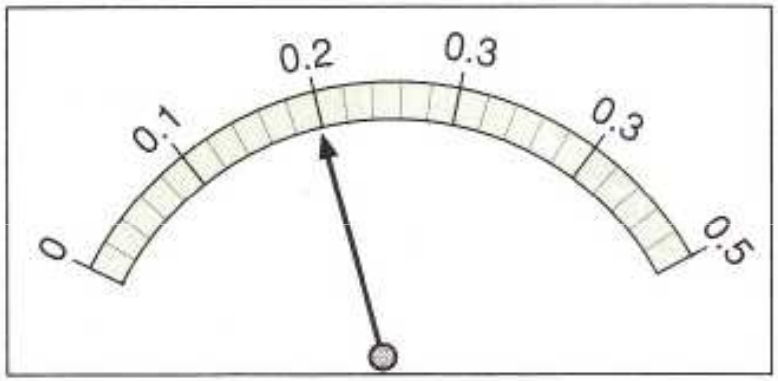

Diagram 6.4

Calculate the resistance from the information given in Diagram 6.4

Use the formula given below.

$$\text{Resistance} = \frac{\text{Voltage}}{\text{Ampere}}$$

[2 *mark*]

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6(f)	Resistance (R) = Voltage (V) Ampere (A $R = \frac{V}{I}$ $R = \frac{0.6\ V}{0.2A}$ = 3.0 Ohm // 3.0Ω 1 mark for correct substitude of numbers 1 mark for the correct answer

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N9 Trial 2008 Q8

8 (a) Diagram 8.1 shows a housewife is cooking soup using different types of pot.

Rajah 8.1 *menunjukkan seorang suriumah sedang memasak sup menggunakan jenis periuk yang berbeza.*

Begining
Permulaan

After 15 minutes
Selepas 15 *minit*

Diagram 8.1
Rajah 8.1

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(i) Based on the observation in Diagram 8.1, state the difference in the hotness of the soup in the pot after 15 minutes.

Berdasarkan pemerhatian pada Rajah 8.1, nyatakan perbezaan kepanasan sup di dalam periuk selepas 15 minit.

The aluminium pot is hotter that glass pot (after 15 minute)

.....

.....

[1 *mark*]
[1 *markah*]

(ii) What inference can be made based on Diagram 8.1?

Apakah inferens yang boleh dibuat berdasarkan Rajah 8.1?

Aluminium pot gets heated faster than glass pot/ Type of pots influece the hotness of the pot

.....

[1 *mark*]
[1 *markah*]

(iii) State your hypothesis based on your observations in Diagram 8.1.

Nyatakan hipotesis anda berdasarkan pemerhatian pada Rajah 8.1.

Aluminium conduct heat faster than glass // different material have different heat conductivity.

.....

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(b) Diagram 8.2 shows the apparatus set-up of an experiment to study the conductivity of different types of rod.

Rajah 8.2 menunjukkan susunan radas bagi satu eksperimen untuk mengkaji konduktiviti rod yang berlainan.

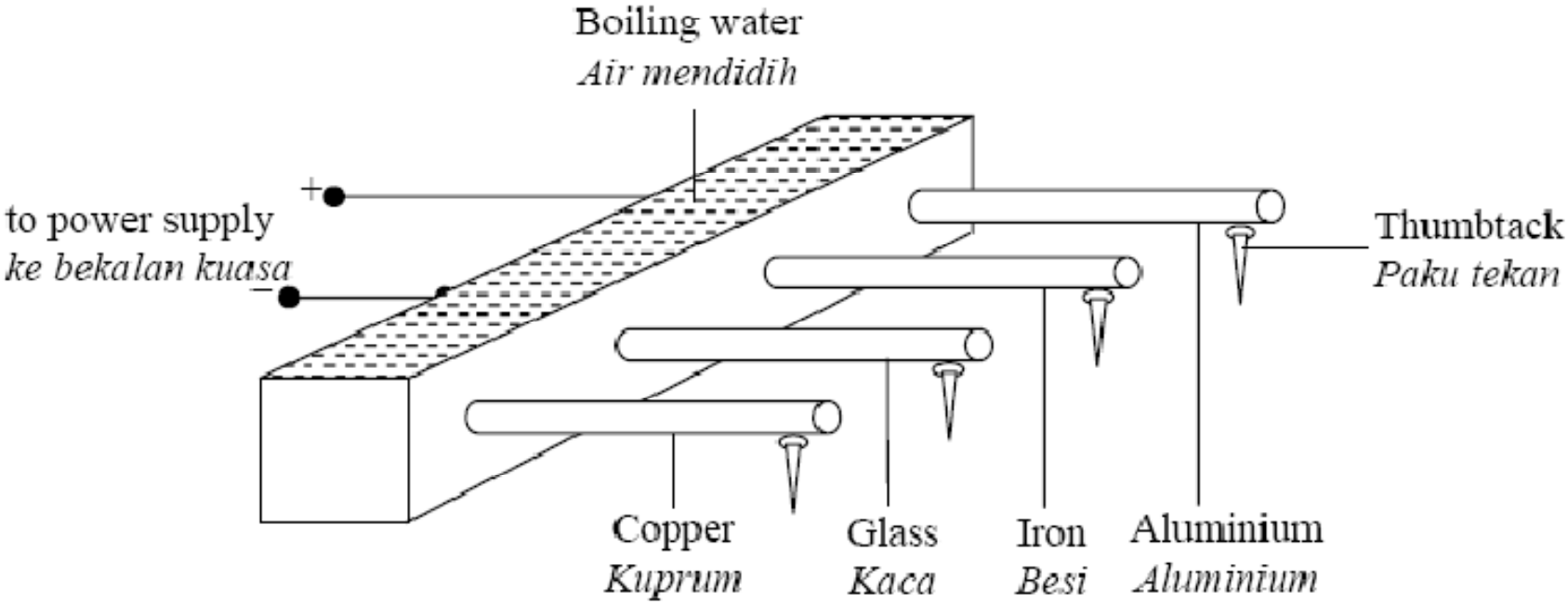

Diagram 8.2
Rajah 8.2

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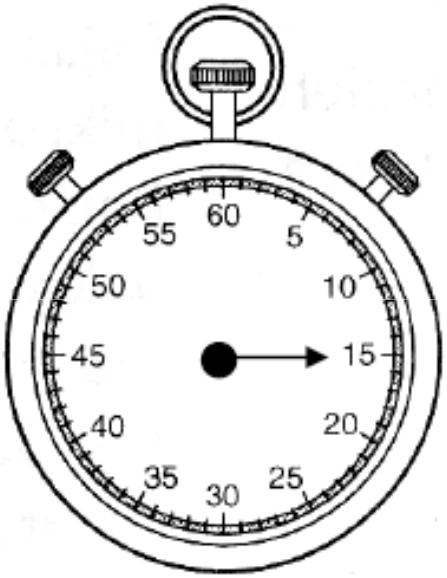
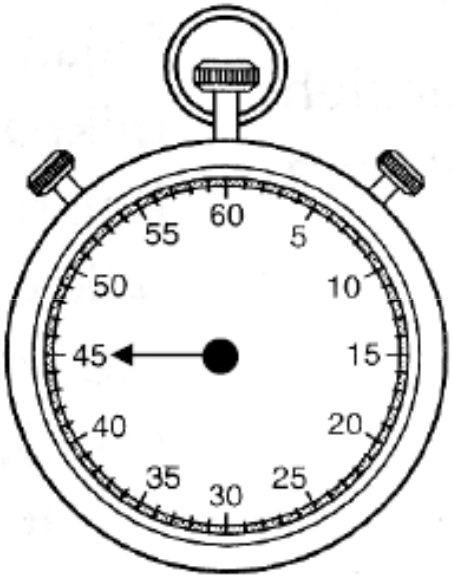
The time for each thumbtack to drop is shown by the stop-watch in Diagram 8.3.

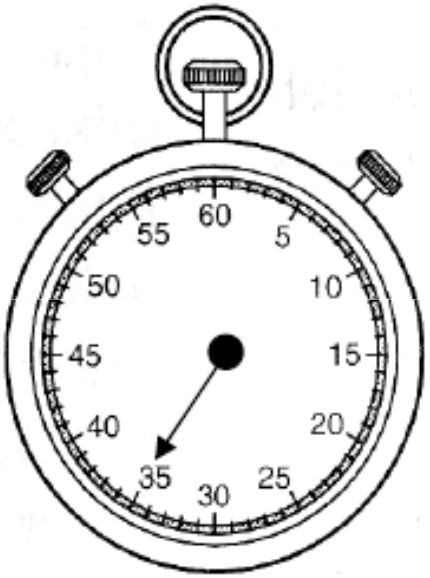
Masa untuk paku tekan jatuh ditunjukkan oleh jam randik dalam Rajah 8.3.



Copper
Kuprum



Iron
Besi



Aluminium
Aluminium

Diagram 8.3
Rajah 8.3

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Based on Diagram 8.3, record the readings of the stopwatch in Table 8.4.

Berdasarkan Rajah 8.3, *rekodkan bacaan jam randik dalam Jadual* 8.4.

Type of rod ***Jenis rod***	Copper *Kuprum*	Glass *Kaca*	Iron *Besi*	Aluminium *Aluminium*
Time / s ***Masa*** / s		60		

Table 8.4
Jadual 8.4

[3 *marks*]

iv. Able to read the reading of the stop watch and record the reading in the table provided

Type of rod ***Jenis rod***	Copper *Kuprum*	Glass *Kaca*	Iron *Besi*	Aluminium *Aluminium*
Time / s ***Masa*** / s	15	60	45	35

3

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Type of rod ***Jenis rod***	Copper *Kuprum*	Glass *Kaca*	Iron *Besi*	Aluminium *Aluminium*
Time / s ***Masa / s***		60		

(c) State the variable involved in this experiment.

Nyatakan pembolehubah yang terlibat dalam eksperimen ini.

(i) Manipulated variable
Pembolehubah dimanipulasikan

Type of rod

(ii) Responding variable
Pembolehubah bergerak balas

Time for the thumbtack to drop

(iii) Constant variable
Pembolehubah dimalarkan

Length of the rod.
Initial temperature of water
Distance of the thumbtack to the water tank

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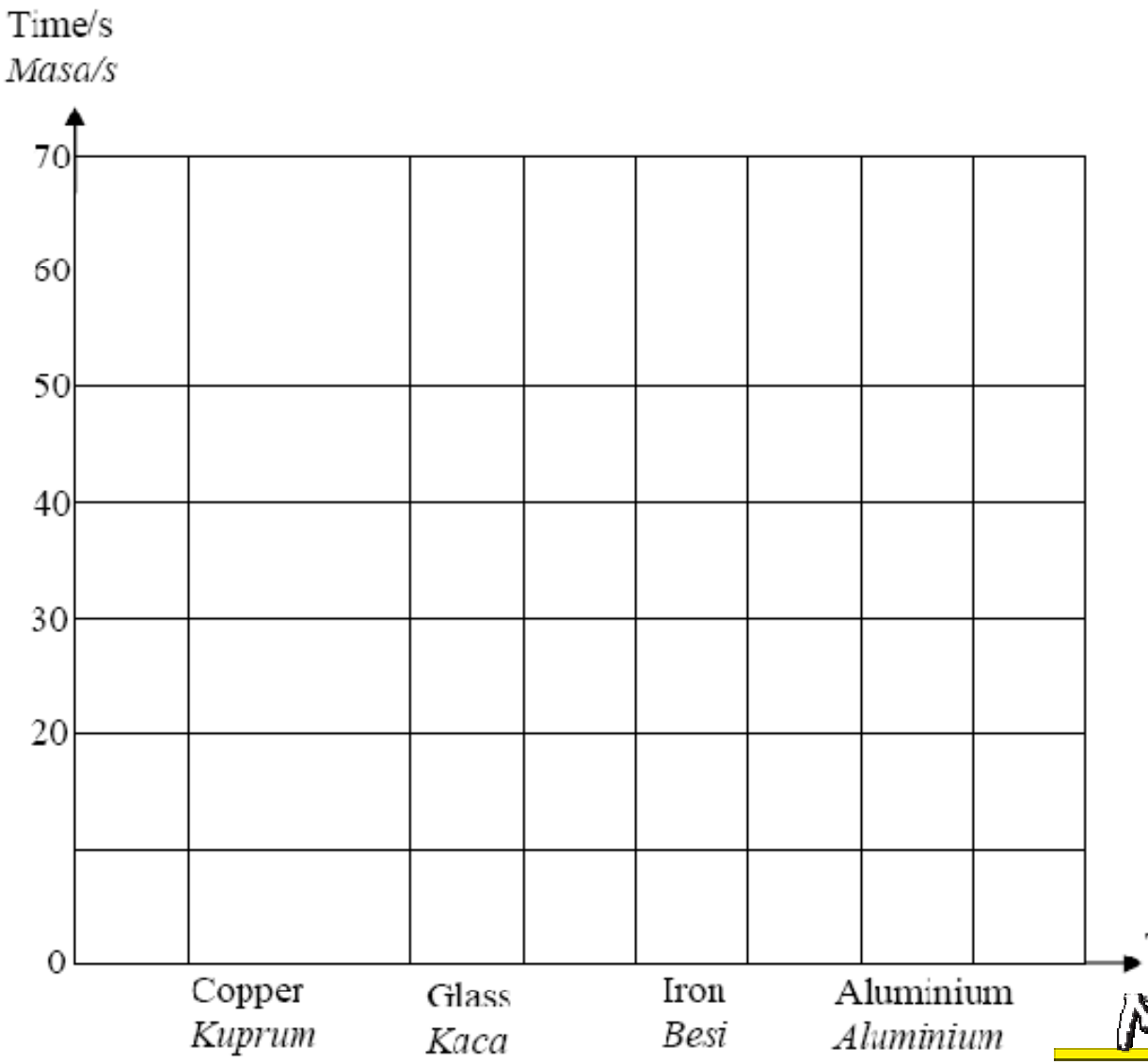
(d) Based on Table 8.1, draw a bar chart of time against type of rod.

Berdasarkan Jadual 8.1, *lukis carta bar masa melawan jenis rod.*



[2 *markah*]

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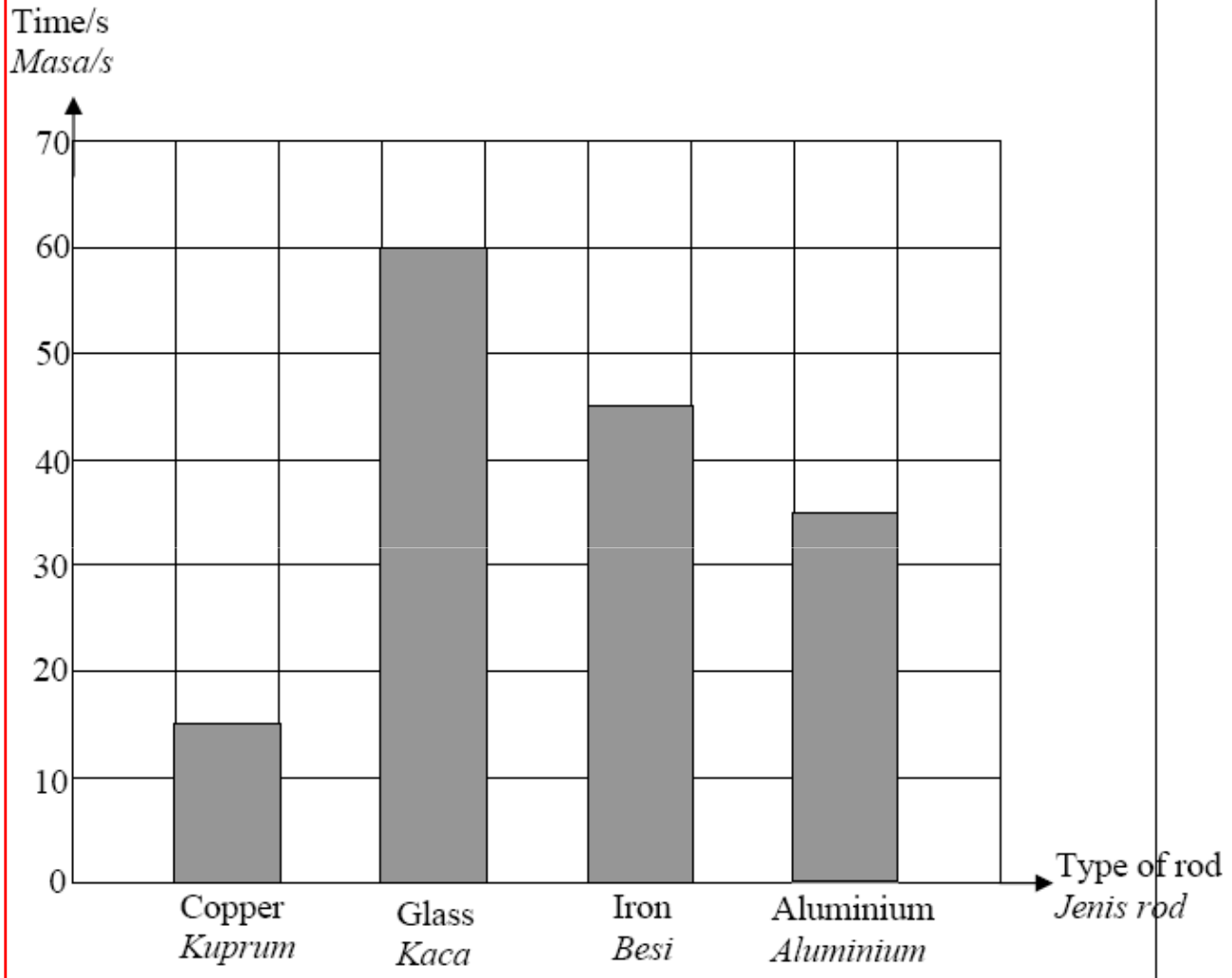
d. Able to plot the bar chart using the data in the table.



All point correct

Graph correct

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(e) Based on the graph drawn in **8**(*d*), state the operational definition of a good heat conductor.

Berdasarkan pada graf yang dilukis di **8**(*d*), *nyatakan definisi operasi bagi konduktor haba yang baik.*

A good heat conductor is the material that conduct heat faster .....

.....

[1 mark]

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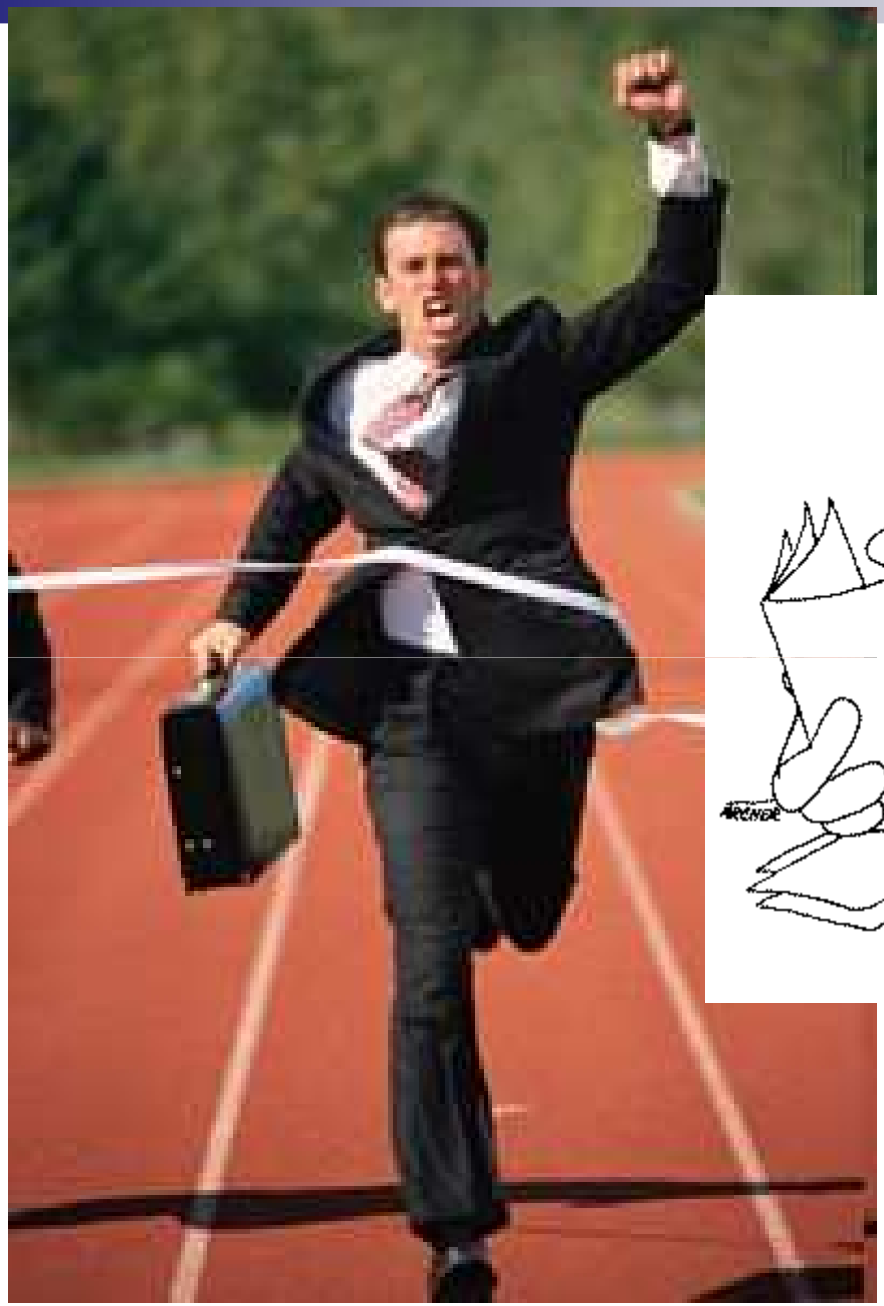
- Do not stay up all night studying the night before. You'll be less clear-headed than if you don't get some rest.

- You'll usually score higher if you're thinking clearly, even if you don't know every last detail.



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