

KERTAS/PAPER

I

Masa: 1 jam 15 minit

Time: 1 hour 15 minutes

40

Arahan: Pilih jawapan yang betul daripada A, B, C dan D.

Instructions: Choose the correct answer from options A, B, C and D.

- 1 Rajah 1 menunjukkan keadaan sepoton tumbuhan selepas seminggu.
Diagram 1 shows the condition of a plant after one week.



Rajah 1
Diagram 1

Mengapakah tumbuhan itu menjadi layu selepas seminggu?
Why does the plant becomes wilted after one week?

- A Tumbuhan itu tidak mendapat cahaya matahari
The plant did not get sunlight
 - B Tumbuhan itu tidak mendapat udara
The plant did not get air
 - C Tumbuhan itu tidak mendapat air
The plant did not get water
 - D Tumbuhan itu tidak mendapat ruang yang mencukupi
The plant did not get enough space
- 2 Antara alat berikut, yang manakah sesuai digunakan untuk mengukur isi padu cecair?
Which of the following is the correct apparatus to measure volume of liquid?
- A Tabung uji
Test tube
 - B Silinder penyukat
Measuring cylinder
 - C Jam randik
Stopwatch
 - D Pembaris
Ruler

- 3 Rajah 2 menunjukkan sebatang magnet bar.
Diagram 2 shows a piece of bar magnet.



Rajah 2
Diagram 2

Ramalkan apa yang akan berlaku jika sebatang paku didekatkan pada magnet itu.
Predict what will happen if a nail is brought near to the magnet.

- A Paku menjauhi magnet bar
The nail is further from the bar magnet
 - B Paku tertarik pada magnet bar
The nail is attracted to the bar magnet
 - C Tiada apa-apa yang berlaku pada paku itu
Nothing happens to the nail
 - D Paku itu akan berputar
The nail will spin
- 4 Berikut merupakan kemahiran proses sains kecuali
The following is the science process skills except
- A memerhati
observing
 - B melukis
drawing
 - C mengelas
classifying
 - D membuat inferens
making inference

- 5 Rajah 3 menunjukkan satu penyiasatan.
Diagram 3 shows an investigation.



Rajah 3
Diagram 3

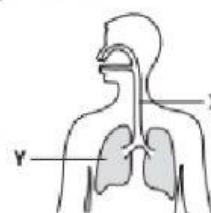
Apakah kesimpulan yang boleh dibuat berdasarkan penyiasatan itu?
What conclusion can be made from this investigation?

- A Akar tumbuhan bergerak balas terhadap sentuhan
The roots of a plant respond to touch
- B Akar tumbuhan bergerak balas terhadap graviti
The roots of a plant respond to gravity
- C Akar tumbuhan bergerak balas terhadap air
The roots of a plant respond to water
- D Akar tumbuhan bergerak balas terhadap cahaya
The roots of a plant respond to light
- 6 Antara organ berikut, yang manakah menyerap oksigen semasa pernafasan?
Which of the following organs absorbs oxygen during breathing?
- A Peparu
Lungs
- B Trakea
Trachea
- C Dada
Chest
- D Hidung
Nose

- 7 Apakah yang berlaku semasa manusia menghembuskan nafas?
What happens when human exhale?

- A Saiz dada mengembang
The size of the chest increases
- B Udara masuk ke dalam peparu
Air enters the lungs
- C Dada mengembang
The chest inflates
- D Dada menurun
The chest moves downward

- 8 Rajah 4 menunjukkan organ-organ yang terlibat dalam proses pernafasan.
Diagram 4 shows the organs involved in the breathing process.



Rajah 4
Diagram 4

Apakah organ-organ yang berlabel X dan Y?
What are the organs labelled X and Y?

	X	Y
A	Peparu Lung	Trakea Trachea
B	Trakea Trachea	Dada Chest
C	Trakea Trachea	Peparu Lung
D	Dada Chest	Peparu Lung

- 9 Mengapakah kadar pernafasan aktiviti cergas lebih tinggi berbanding kadar pernafasan aktiviti pasif?
Why does the breathing rate after an active activity is higher than the breathing rate after a passive activity?

- A Badan memerlukan lebih banyak oksigen
Our body need more oxygen
- B Hidung memerlukan lebih banyak udara
Our nose need more air
- C Badan boleh melakukan banyak aktiviti
Our body could do more activity
- D Otak memerlukan udara
Our brain needs air

- 10** Kadar pernafasan bergantung kepada jenis aktiviti yang dilakukan.
KBAT The rate of breathing depends on the type of activities carried out.

Kadar pernafasan Rate of breathing	Aktiviti Activity
Tinggi High	X
Sederhana Moderate	Y
Rendah Low	Z

Jadual 1
Table 1

Apakah aktiviti X, Y dan Z?
 What are activity X, Y and Z?

	X	Y	Z
A	Bermain biola Playing violin	Memasak Cooking	Mencangkul Ploughing
B	Berlari Running	Bermain boling Playing bowling	Tidur Sleeping
C	Berbaring Lying down	Bersenam Exercising	Membaca Reading
D	Berbasikal Riding	Berenang Swimming	Menonton televisyen Watching television

- 11** Apakah yang dimaksudkan dengan perkumuhan?
 What is the meaning of excretion?

- A Penyingkiran karbon dioksida daripada badan
 The removal of carbon dioxide from the body
- B Penyingkiran bahan buangan daripada badan
 The removal of waste material from the body
- C Penyingkiran saiz dan bentuk badan
 The changes in size and shape of body
- D Membuang tinja daripada badan
 The removal of faeces from the body

- 12** Antara berikut, yang manakah **bukan** bahan kumuh?
 Which of the following is **not** the product of excretion?

- A Peluh
Sweat
- B Air kencing
Urine
- C Wap air
Water vapour
- D Najis
Faeces

- 13** Rajah 5 menunjukkan satu organ perkumuhan.
 Diagram 5 shows an excretory organ.



Rajah 5
Diagram 5

Apakah bahan kumuh yang dihasilkan oleh organ di atas?
 What is the waste product produced by the above organ?

- A Air kencing
Urine
- B Karbon dioksida
Carbon dioxide
- C Wap air
Water vapour
- D Peluh
Sweat

- 14** Antara berikut, yang manakah merupakan proses penyingkiran bahan makanan yang tidak diperlukan daripada badan?
 Which of the following is the process of discarding food residues that are not needed by the body?

- A Pernafasan
Breathing
- B Perkumuhan
Excretion
- C Penyahtinjaan
Defecation
- D Pembiakan
Reproduction

- 15** Rajah 6 menunjukkan suatu gerak balas terhadap rangsangan.
 Diagram 6 shows a response to a stimulus.



Rajah 6
Diagram 6

Apakah rangsangan yang terlibat dalam situasi di atas?

What stimulus is involved in the above situation?

- | | |
|--------------------------|-------------------------|
| A Cahaya
Light | C Rasa
Taste |
| B Bau
Smell | D Bunyi
Sound |

- 16** Antara maklumat berikut, yang manakah diperoleh dengan menggunakan deria pendengaran?

Which of the following information is obtained by using the sense of hearing?

- A** Ambulans membunyikan siren kecemasan
Ambulance turns on the emergency siren
- B** Kiub ais berasa sejuk
An ice cube is cold
- C** Daun pokok menjadi kekuningan
The tree leaves become yellowish
- D** Daging basi mengeluarkan bau yang busuk
Rotten meat emits bad smell

- 17** Apakah gerak balas Haikal apabila dia terpijak batu yang tajam?

KBAT

What is Haikal's response when he accidentally steps on a sharp rock?

- A** Dia menangis
He cries
- B** Dia melompat tinggi
Jump upwards
- C** Mengangkat kaki serta-merta
Lift his foot immediately
- D** Tidak berbuat apa-apa
Do nothing

- 18** Rajah 7 menunjukkan seekor haiwan.
Diagram 7 shows an animal.



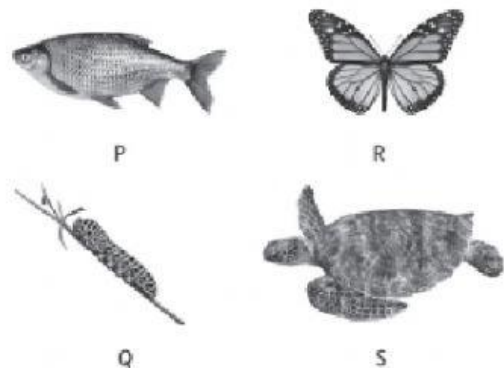
Rajah 7
Diagram 7

Apakah organ pernafasan haiwan di atas?
What is the breathing organ of the animal above?

- | | |
|--------------------------|-------------------------------------|
| A Peparu
Lungs | C Spirakel
Spiracles |
| B Insang
Gills | D Kulit lembap
Moist skin |

- 19** Rajah 8 menunjukkan empat ekor haiwan P, Q, R dan S.

Diagram 8 shows four animals P, Q, R and S.



Rajah 8
Diagram 8

Haiwan yang manakah bernafas melalui spirakel?

Which animal breathe through their spiracles?

- | | |
|-----------------------------|-----------------------------|
| A P dan S
P and S | C P dan Q
P and Q |
| B R dan Q
R and Q | D R dan S
R and S |

- 20** Antara berikut, yang manakah **bukan** organ pernafasan haiwan?

*Which of the following is **not** the breathing organ of animals?*

- | | |
|--------------------------|--------------------------------|
| A Peparu
Lungs | C Spirakel
Spiracles |
| B Insang
Gills | D Jantung
Heart |

- 21** Rajah 9 menunjukkan seekor belalang.

KBAT

Diagram 9 shows a grasshopper.



Rajah 9
Diagram 9

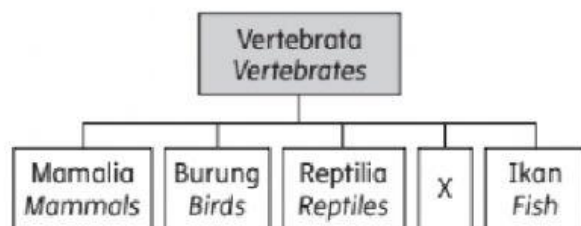
Mengapakah belalang tidak mati apabila kepalanya direndam dalam air?

Why a grasshopper is still alive even after its head is immersed in water?

- A** Kerana belalang boleh bernafas dalam air.
Because the grasshopper can live on land and in water.

- B Kerana air mengandungi oksigen
Because water contains oxygen
- C Kerana struktur pernafasannya terletak di bahagian abdomennya
Because the respiratory structure is at its abdomen
- D Kerana belalang boleh hidup di darat dan di dalam air
Because the grasshopper can live on land and in water

- 22 Rajah 10 menunjukkan kumpulan-kumpulan haiwan vertebrata.
Diagram 10 shows groups of vertebrates.



Rajah 10
Diagram 10

Apakah kumpulan haiwan X?
What is animal group X?

- A Herbivor
Herbivores
- B Sisik kering
Dry scale
- C Amfibia
Amphibians
- D Invertebrata
Invertebrates
- 23 Maklumat berikut menunjukkan ciri-ciri sepunya sekumpulan vertebrata.
The following information shows the common characteristics of a group of vertebrates.

- Bernafas melalui peparu
Breathes through lungs
- Berdarah sejuk
Cold-blooded
- Membiak melalui persenyawaan luar
Reproduce by external fertilisation

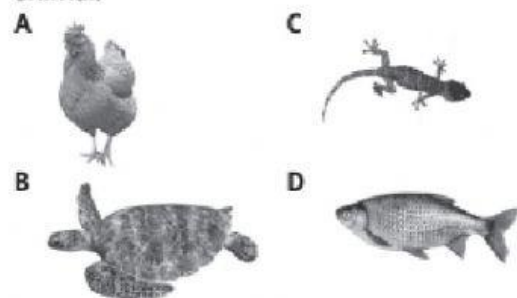
Apakah nama kumpulan haiwan itu?
What is the name of the animal group?

- A Burung
Birds
- B Mamalia
Mammals
- C Reptilia
Reptiles
- D Ikan
Fish

- 24 Antara berikut, yang manakah merupakan ciri-ciri sepunya reptilia dan amfibia?
Which of the following is the common characteristic of both reptiles and amphibians?

- A Badan ditutup bulu pelepah
Body covered with feathers
- B Menjalankan persenyawaan dalam
Carry out internal fertilisation
- C Bernafas melalui insang
Breathe through gills
- D Berdarah sejuk
Cold-blooded

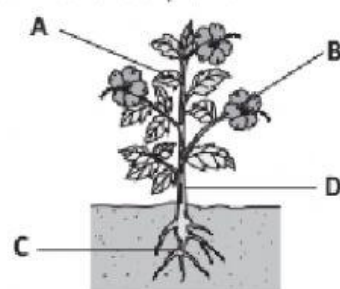
- 25 Antara berikut, yang manakah adalah haiwan berdarah panas?
Which of the following is a warm-blooded animal?



- 26 Antara berikut, yang manakah merupakan haiwan daripada kumpulan mamalia?
Which of the following is an animal from a group of mammals?

- A Penguin
Penguin
- B Ikan lumba-lumba
Dolphin
- C Buaya
Crocodiles
- D Katak
Frog

- 27 Rajah II menunjukkan sejenis tumbuhan.
Diagram II shows a plant.



Rajah II
Diagram II

Antara bahagian yang berlabel A, B, C dan D, bahagian manakah yang menyerap air?
Which labelled part, A, B, C or D, absorbs water?

- 28 Mengapakah daun pokok semalu menguncup apabila disentuh?

KBAT

Why do the leaves of a mimosa plant fold up when touched?

- A Untuk menyamar seperti daun layu
To camouflage as wilted leaves
- B Untuk mengelakkan daripada dimakan oleh musuh
To prevent from being eaten by enemies
- C Untuk memerangkap serangga
To trap insects
- D Untuk melindungi daripada cuaca panas
To protect against hot weather

- 29 Apakah maksud proses fotosintesis?
What is meant by the photosynthesis process?

- A Proses tumbuhan menghasilkan makanan sendiri
The plants process to produce their own food
- B Proses tumbuhan membebaskan oksigen
The plants process to release oxygen
- C Proses tumbuhan menghasilkan buah
The plants process to produce fruit
- D Proses tumbuhan menghasilkan sumber makanan kepada manusia
The plants process to produce food for humans

- 30 Mengapakah tumbuhan tidak perlu bergerak seperti haiwan untuk mencari makanan?

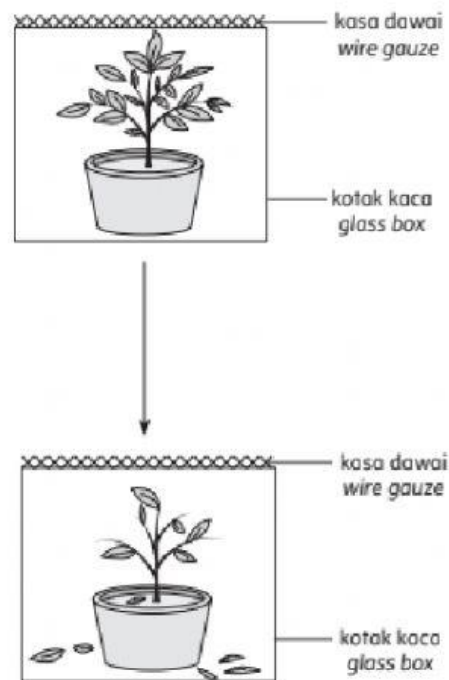
KBAT

Why do plants need not to move like animals to find food?

- A Haiwan memerlukan banyak makanan berbanding daripada tumbuhan
Animals need more food compared to plants
- B Tumbuhan perlukan cahaya matahari sahaja untuk hidup
Plants need only sunlight to live
- C Tumbuhan menghasilkan makanannya sendiri
The plants produce their own food
- D Air yang diserap oleh tumbuhan memberikan cukup nutrien.
The water absorbed by plants supplies them with enough nutrients.

- 31 Rajah 12 menunjukkan suatu penyiasatan di dalam makmal dalam tempoh satu minggu.

Diagram 12 shows an investigation in a laboratory over one week.



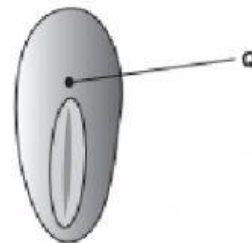
Rajah 12
Diagram 12

Apakah kesimpulan penyiasatan ini?

What is the conclusion of this investigation?

- A Tumbuhan memerlukan air untuk hidup
Plants need water to live
- B Tumbuhan memerlukan udara untuk hidup
Plants need air to live
- C Tumbuhan memerlukan tanah untuk hidup
Plants need soil to live
- D Tumbuhan memerlukan cahaya matahari untuk hidup
Plants need sunlight to live

- 32 Rajah 13 menunjukkan biji benih kacang.
Diagram 13 shows a bean seed.



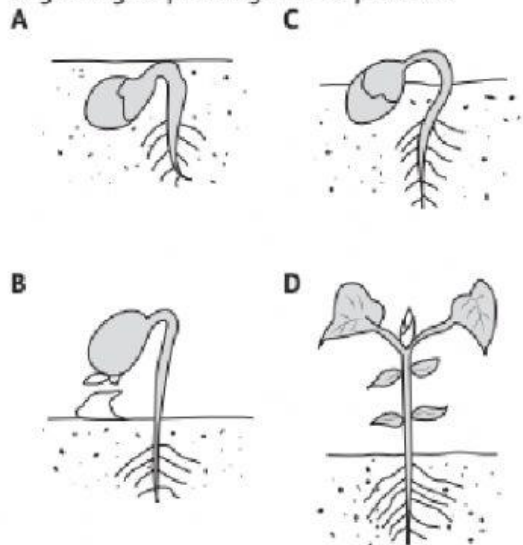
Rajah 13
Diagram 13

Apakah bahagian berlabel Q?
What is the part labelled Q?

- A Parut
Scar
- B Kotiledon
Cotyledon
- C Pucuk
Shoot
- D Liang seni
Micropyle

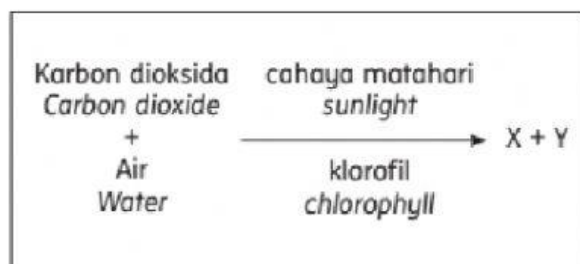
- 33 Antara berikut, peringkat yang manakah menunjukkan mula berlakunya proses fotosintesis?

Which of the following stages shows the beginning of photosynthesis process?



- 34 Persamaan berikut menunjukkan proses fotosintesis bagi tumbuhan.

The following equation shows the photosynthesis process of plants.



Apakah hasil proses fotosintesis yang mewakili X dan Y?
What is the result of the photosynthesis process representing X and Y?

	X	Y
A	Oksigen Oxygen	Air Water
B	Protein Proteins	Kanji Starch
C	Oksigen Oxygen	Kanji Starch
D	Air Water	Oksigen Oxygen

- 35 Antara berikut, yang manakah merupakan faktor yang mempengaruhi saiz bayang-bayang objek dalam sesebuah eksperimen?

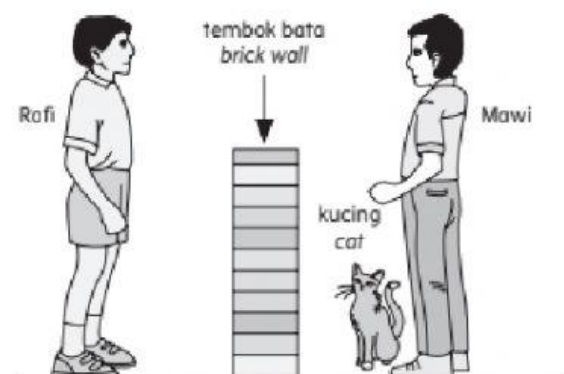
Which of the following are the factors affecting size of a shadow in an experiment?

- M - Orientasi objek
The orientation of an object
- N - Jarak di antara objek dengan skrin
The distance between an object and screen
- O - Kedudukan pemerhati
The position of observer
- P - Kedudukan lampu suluh
The position of the torchlight

- A M dan O
M and O
- B M dan N
M and N
- C N dan P
N and P
- D O dan P
O and P

- 36 Rajah 14 menunjukkan suatu situasi.

KBAT Diagram 14 shows a situation.



Rajah 14
Diagram 14

Rafi tidak dapat melihat kucing Mawi disebabkan satu sifat cahaya. Apakah sifat itu?

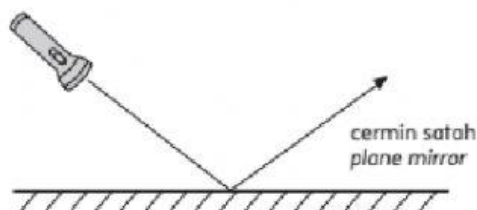
Rafi cannot see Mawi's cat due to one characteristic of light. What is the characteristic?

- A Cahaya bergerak lurus
Light travels in a straight line
- B Cahaya boleh dipantulkan
Light can be reflected
- C Cahaya boleh dihalang
Light can be blocked
- D Kerana cahaya bergerak ke semua arah
Light travels in all directions

- 37 Antara alat berikut, yang manakah menggunakan prinsip pantulan cahaya?
Which of the following devices make use of the reflection of light?

- A Kaleidoskop
Kaleidoscope
- B Mikroskop
Microscope
- C Binokular
Binocular
- D Teleskop
Telescope

- 38 Rajah 15 menunjukkan suatu penyiasatan.
Diagram 15 shows an investigation.



Rajah 15
Diagram 15

Antara pernyataan berikut, yang manakah paling sesuai menerangkan Rajah 15?

Which of the following statements is the most suitable to describe Diagram 15?

- A Cahaya merupakan satu bentuk tenaga
Light is a form of energy
- B Cahaya boleh dipantulkan
Light can be reflected
- C Cahaya tidak menembusi objek legap
Light cannot pass through an opaque object
- D Cahaya bergerak kesemua arah
Light travels in all directions

- 39 Antara objek berikut, yang manakah membentuk bayang-bayang yang jelas apabila diletakkan di hadapan sumber cahaya?
Which of the following objects forms a solid shadow when it is placed in front of light source?

Which of the following objects forms a solid shadow when it is placed in front of light source?

- A Plastik jernih
Transparent plastic
- B Kertas lut-cahaya
Translucent paper
- C Pen
Pen
- D Kaca jernih
Clear glass

- 40 Apakah yang dimaksudkan dengan pembiasan cahaya?

What is the meaning of light refraction?

- A Cahaya melantun apabila terkena atas satu permukaan
Light bounces back from a surface
- B Pembentukan bayang-bayang oleh sesuatu objek
Formation of shadow by an object
- C Cahaya bergerak dari satu medium ke medium yang lain
Light travels from one medium to another medium
- D Cahaya bergerak dalam satu garis lurus
Light travels in a straight line

KERTAS SOALAN TAMAT
END OF QUESTION PAPER