1. Antara berikut,yang manakah ciri-ciri bahan yang boleh dibuang ke dalam singki?
Which of the following is the characteristic of materials that can be disposed of into a sink?

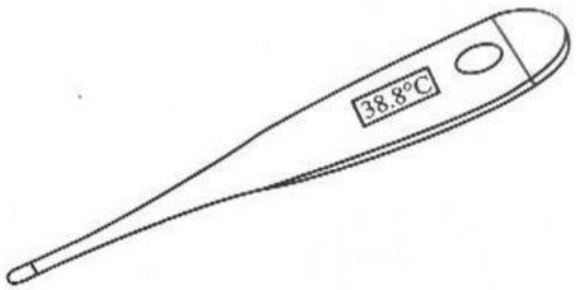
A Asid lemah
Weak acid
B Bahan meruap
Volatile substance
C Mempunyai nilai pH 10
Having a pH value of 10
D Bahan buangan radioaktif
Radioactive waste

2. Apakah kepentingan melakukan teknik tekanan dada semasa memberikan bantuan kecemasan Resusitasi Kardiopulmonari (CPR)?
What is the importance of performing chest compressions technique while providing Cardiopulmonary Resusitation (CPR) emergency help?

A Menghantar oksigen terus ke otak
Sends oxygen directly to the brain
B Menghasilkan peredaran darah secara buatan
Produces artificial blood circulation
C Menerima udara beroksigen ke dalam peparunya
Receiving oxygenated air into the lungs
D Menyingkirkan karbon dioksida daripada badan mangsa
Removes carbon dioxide from the victim's body

LIVEWORKSHEETS

3. Rajah 1 menunjukkan bacaan suhu badan Wafiq.
Diagram 1 shows Wafiq's body temperature reading.



Rajah 1 / *Diagram 1*

Antara berikut, apakah faktor yang menyebabkan bacaan suhu tersebut?
Which of the following is the factor that cause the temperature reading?

A Jangkitan patogen
Pathogen infection

B Makan berlebihan
Overeating

C Kurang selera makan
Loss of appetite

D Cukup tidur 8 jam sehari
Get enough sleep for 8 hours a day

LIVEWORKSHEETS

4. Liyana mempunyai ketinggian 1.54 m dan berjisim 65 kg.
Apakah kategori Indeks Jisim Badan (BMI) Liyana?
Liyana has a height of 1.54 m and mass of 65 kg.
What is the category of Liyana's Body Mass Index?

$$\text{BMI} = \frac{\text{Jisim badan (kg)}}{(\text{ketinggian})^2\ (\text{m}^2)}$$

$$\textit{BMI} = \frac{\textit{Body mass (kg)}}{(\textit{Height})^2\ (\text{m}^2)}$$

	BMI	Kategori *Category*
A	< 18.5	Kurang jisim badan *Underweight*
B	18.5 – 24.90	Jisim badan unggul *Desirable weight*
C	25.0 – 29.9	Berlebihan jisim badan *Overweight*
D	≥ 30.0	Obes *Obese*

5. Antara berikut, yang manakah merupakan pengangkutan hijau?
Which of the following is green transportation?

A Kenderaan perkhidmatan
Service vehicle

B Pengangkutan awam
Public transport

C Basikal
Bicycle

D Teksi
Taxi

LIVEWORKSHEETS

6 Kaji pernyataan berikut,
Examine the following statements,

> Pak Ali mendapati tanah kebunnya tidak subur. Pokok yang ditanam kerap diserang oleh serangga perosak. Dia ingin mengatasi masalah tersebut tanpa mencemarkan tanah kebunnya.
> *Pak Ali found that the soil in his garden was not fertile. The trees planted often attacked by pests. He wanted to overcome the problem without polluting his garden soil.*

Apakah yang perlu dilakukan oleh Pak Ali?
What should Pak Ali do?

A Menggunakan baja kimia dan semburan racun
Use chemical fertilizers and pesticides

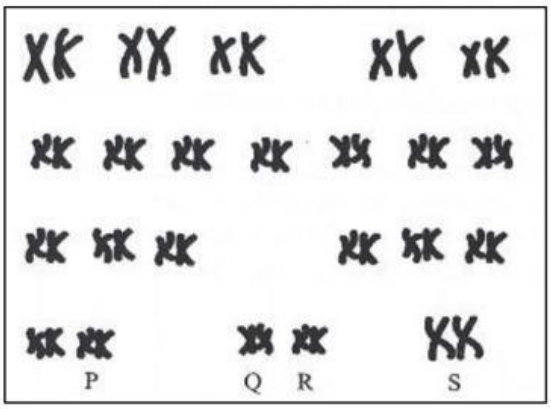
B Menggunakan baja kompos dan kawalan biologi
Use compost and biological control

C Menggunakan baka terpilih dan baja bermutu tinggi
Using selected breeds and high quality fertilizers

D Menggunakan racun perosak dan peralatan berteknologi moden
Using pesticides and equipment with modern technology

LIVEWORKSHEETS

7 Rajah 2 menunjukkan kariotip bagi seorang individu.
Diagram 2 shows a karyotype of an individual.



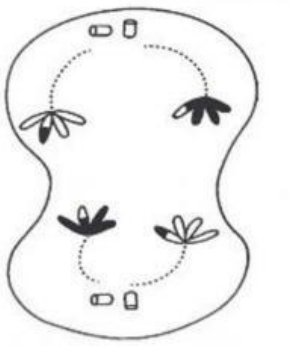
Rajah 2 / *Diagram 2*

Antara yang berikut, kromosom homolog manakah yang menentukan jantina individu tersebut?
Which of the following homologous chromosomes determines the gender of the individual?

A P
B Q
C R
D S

LIVEWORKSHEETS

8 Rajah 3 menunjukkan satu fasa dalam proses pembahagian sel.
Diagram 3 shows a phase in a cell division process.



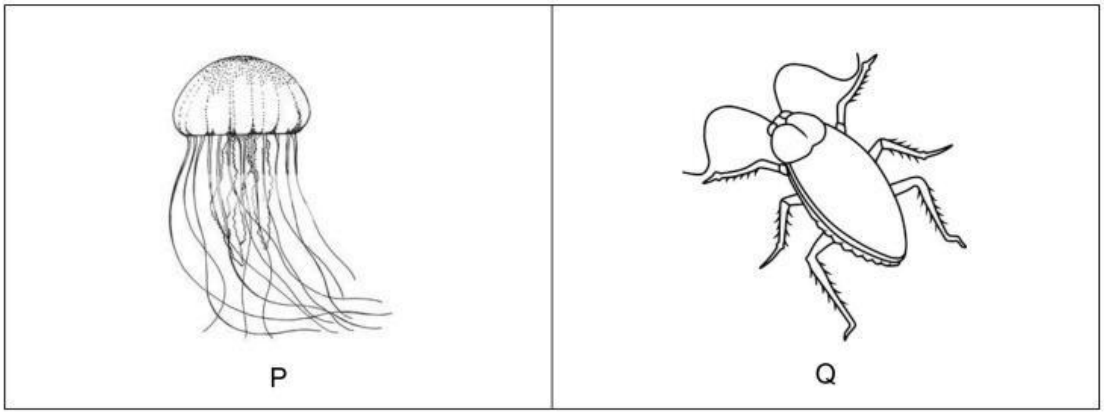
Rajah 3 / *Diagram 3*

Di manakah proses ini berlaku?
Where does this process occur?

A Testis
Testes
B Ginjal
Kidney
C Peparu
Lung
D Rambut
Hair

LIVEWORKSHEETS

9. Rajah 4 menunjukkan dua jenis haiwan.
Diagram 4 shows two type of animals.



Rajah 4 / *Diagram 4*

Antara berikut, yang manakah betul mengenai sistem sokongan bagi haiwan P dan Q?
Which of the following is correct about the support system for animal P and Q?

	P	Q
A	Rangka luar *Exoskeleton*	Rangka hidrostatik *Hydrostatic skeleton*
B	Rangka dalam *Endoskeleton*	Rangka luar *Exoskeleton*
C	Rangka hidrostatik *Hydrostatic skeleton*	Rangka luar *Exoskeleton*
D	Rangka luar *Exoskeleton*	Rangka dalam *Endoskeleton*

LIVEWORKSHEETS

10 Bagaimanakah tumbuhan akuatik seperti teratai dapat terapung di permukaan air?
How can aquatic plants like lilies float on the surface of the water?

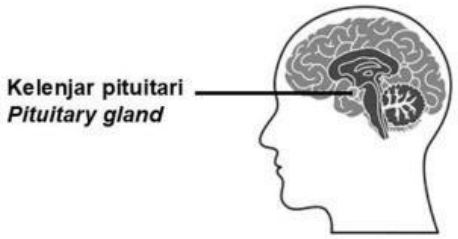
A Bergantung sepenuhnya kepada kekuatan arus air.
Depends entirely on the strength of the water current.

B Mengandungi lapisan lilin yang tebal pada permukaan daun.
Has a thick waxy layer on the surface of the leaves

C Terdapat akar yang sangat panjang sehingga ke dasar kolam.
Has very long roots that reach the bottom of the pond

D Mempunyai tisu aerenkima yang mengandungi banyak ruang udara.
Has aerenchyma tissue that contains many air spaces.

11. Rajah 5 menunjukkan satu kelenjar endokrin.
Diagram 5 shows an endocrine gland.



Rajah 5 / *Diagram 5*

Antara berikut, yang manakah kesan kekurangan hormon yang dirembeskan oleh kelenjar tersebut?
Which of the following is a result of the lack of hormones secreted by the gland?

A Merasa cemas
Feeling anxious

B Lambat akil baligh
Delayed puberty

C Sentiasa berasa dahaga
Always feeling thirsty

D Aras glukosa darah meningkat
Blood glucose levels increase

LIVEWORKSHEETS

12. Seorang murid cedera parah dalam satu kemalangan jalan raya.
Antara berikut, yang manakah boleh digunakan untuk mengurangkan kesakitan?
A student was seriously injured in a road accident.
Which of the following can be used to reduce pain?

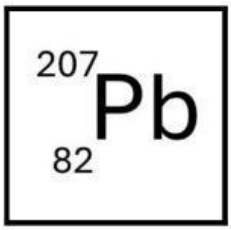
A Morfin
Morphine
B Ketamin
Ketamine
C Barbiturat
Barbiturates
D Amfetamina
Amphetamines

13. Berapakah bilangan atom dalam satu molekul air?
How many atoms are in a water molecule?

A 3
B 4
C 5
D 6

LIVEWORKSHEETS

14. Rajah 6 menunjukkan isotop plumbum.
Diagram 6 shows the isotopes of lead.



Rajah 6 / *Diagram 6*

Apakah nombor nukleon bagi isotop plumbum?
What is the nucleon number of the isotope of lead?

A 82
B 125
C 207
D 289

15. Keluli dan gangsa merupakan sejenis aloi.
Apakah komposisi unsur yang terdapat pada gangsa?
Steel and bronze are alloys.
What is the composition of the elements found in bronze?

A Aluminium dan zink
Aluminium and zinc
B Kuprum dan zink
Copper and zinc
C Besi dan karbon
Iron and carbon
D Kuprum dan timah
Copper and tin

LIVEWORKSHEETS

16. Bahan Q mempunyai sifat-sifat berikut :
Substance Q has the following properties:

- Tahan terhadap haba
  Heat-resistant
- Keras dan lebih kenyal
  Hard and more elastic
- Penebat elektrik yang baik
  Good electrical insulation

Bahan Q ialah
Substance Q is

A Perspeks
Perspex
B Getah asli
Natural rubber
C Polistirena
Polystyrene
D Getah tervulkan
Vulcanised rubber

LIVEWORKSHEETS

17. Rajah 7 menunjukkan satu kaedah perubatan.
Diagram 7 shows a medical method.



Rajah 7 / *Diagram 7*

Antara berikut, yang manakah ciri kaedah perubatan tersebut?
Which of the following is the characteristic of the medical method?

A Rawatan lebih berkesan dan cepat
Treatment is effective and fast

B Diwarisi dan diamalkan turun-temurun
Inherited and practiced from generation to generation

C Pembuktian keberkesanan secara klinikal
The effectiveness is clinical tested

D Tidak melibatkan pembedahan dan jahitan
Does not involve surgery and stitches

LIVEWORKSHEETS

18. Antara berikut, yang manakah faktor dalaman yang menghasilkan radikal bebas dalam badan manusia?
Which of the following is an internal factor that produce free radicals in the human body?

A Asap rokok
Cigarette smoke
B Keradangan
Inflammation
C Sinaran ultraungu
Ultraviolet rays
D Pencemaran udara
Air pollution

19. Berapakah pecutan Usain Bolt jika berlari dalam keadaan pegun dan mencecah halaju 10.44 ms^{-1} di garisan penamat 100 meter dalam tempoh 9.58 saat?
What is the acceleration of Usain Bolt if he starts from rest and attains a velocity of 10.44 ms^{-1} at the 100 metres finish line in 9.58 seconds?

$$\text{Pecutan} = \frac{\text{Halaju akhir- Halaju awal}}{\text{Masa}}$$

$$\textit{Acceleration} = \frac{\textit{Final velocity- Initial velocity}}{\textit{Times taken}}$$

A $-1.09\ ms^{-2}$
B $1.09\ ms^{-2}$
C $-9.09\ ms^{-2}$
D $9.09\ ms^{-2}$

LIVEWORKSHEETS

20. Kepala tukul yang longgar boleh diketatkan dengan menghentakkan bahagian pemegang tukul pada permukaan keras. Hentakan yang laju menyebabkan kepala tukul bergerak ke bawah.
Apakah yang menyebabkan keadaan itu berlaku?
The loose head of a hammer can be tightened by banging its handle against a hard surface. A swift bang drives the hammer head downwards.
What causes the condition to occur?

A Daya
Force
B Inersia
Inertia
C Pecutan
Acceleration
D Momentum
Momentum

21. Antara berikut, yang manakah kelebihan stesen jana kuasa tenaga nuklear?
Which of the following is the advantage of nuclear power station?

A Kos pembinaan yang rendah
Low construction costs
B Sumber tenaga yang mudah diperolehi
Easily obtained sourse of energy
C Membebaskan gas rumah hijau yang sedikit
Release little greenhouse gases
D Sisa radioaktif yang dihasilkan tidak menjejaskan kesihatan
The radioactive waste produced does not affect health

LIVEWORKSHEETS

22. Antara berikut, pilih padanan yang betul kesan somatik dan kesan genetik akibat penyebaran radiasi daripada ujian nuklear.
Which the following matches of somatic and genetic effects of radiation spread from nuclear tests.

	Kesan somatik ***Somatic effects***	**Kesan genetik** ***Genetic effects***
A	Kanser *Cancer*	Loya *Nausea*
B	Keletihan *Tiredness*	Katarak *Cataract*
C	Mutasi sel *Cell mutation*	Leukimia *Leukaemia*
D	Keguguran rambut *Hair loss*	Kecacatan pada bayi *Deformation in babies*

23. Antara berikut, mikroorganisma manakah boleh menjalankan proses fotosintesis?
Which of the following microorganism can carry out the process of photosynthesis?

A Alga
Algae
B Virus
Virus
C Fungi
Fungi
D Protozoa
Protozoa

LIVEWORKSHEETS