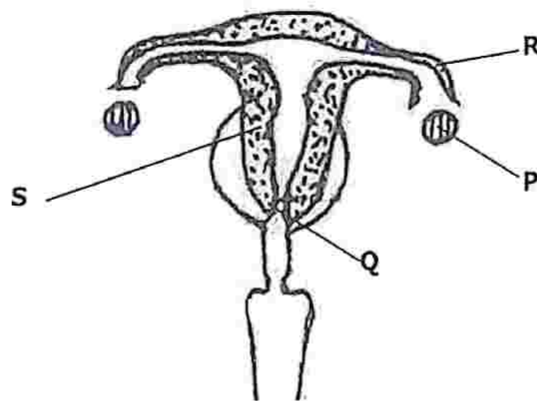


- 1 Below is a diagram of the female reproductive system.



Which letter identifies the organ called cervix?

- A P
 B Q
 C R
 D S
- 2 Why is it important for one to observe personal hygiene of their reproductive organs?

- A Allow the organs to grow gradually.
 B Avoid the organs getting infections.
 C Prevent sexually transmitted diseases.
 D Help prevent HIV transmission.

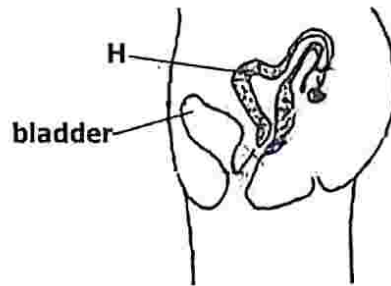
- 3 Below is a list of activities that take place in the process of fertilisation and embryo development over a period of time.

1. fusion of sperm and ovum
2. sexual intercourse
3. formation of zygote
4. attachment of zygote to uterus

Which of the following shows the correct order of how these activities happen?

- A 2 → 1 → 3 → 4
 B 1 → 3 → 4 → 2
 C 2 → 1 → 4 → 3
 D 1 → 4 → 2 → 3

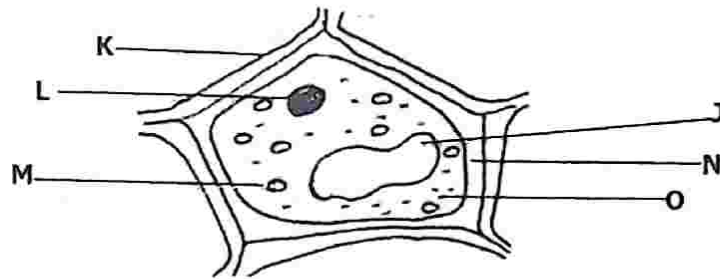
- 4 The diagram below shows the side view of the female reproductive organs.



Identify structure **H** and its corresponding function.

- | | Structure H | Function |
|-----------------------|-------------|-------------------------------------|
| <input type="radio"/> | A Placenta | Supplying food and oxygen to foetus |
| <input type="radio"/> | B Oviduct | Passage of the ovum from ovary ✓ |
| <input type="radio"/> | C Uterus | Organ where embryo develops |
| <input type="radio"/> | D Ovary | To produce female sex cells |
- 5 State the food type that you would prescribe for a manual worker.
Food rich in ...
- A fats.
- B proteins.
- C minerals.
- D carbohydrates. ✓
- 6 Which of the following information may **not** be obtained from the children's clinic card?
- A Number of siblings.
- B Number of visits to the clinic.
- C Age of the child's mother. ✓
- D Age of the child.
- 7 Which pair shows correctly causes of pollution to the environment?
- | | Caused by human | Caused by nature |
|-------------------------|----------------------|--------------------------|
| <input type="radio"/> A | burning fossil fuels | volcanic eruptions ✓ |
| <input type="radio"/> B | forest fires | industrial emission |
| <input type="radio"/> C | wind erosion | incinerators |
| <input type="radio"/> D | pollen dispersal | waste from mining plants |

8 Below is a diagram of a plant cell as seen under a microscope.



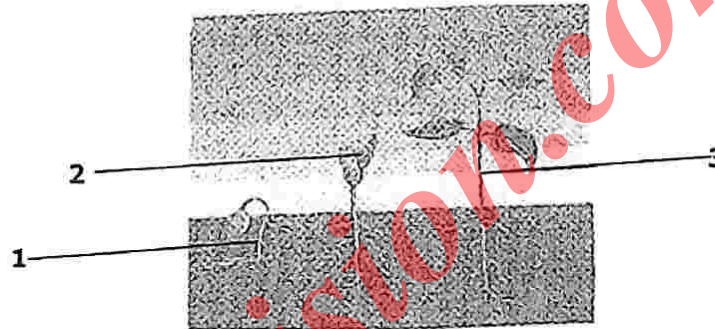
Which labelled structure represents the protoplasm?

- A L and O
- B L and J
- C N and M ✓
- D K and M

Vacuole

Vacuole

9 The diagram below shows stages of plant growth.



Which regions of plant growth are shown by the numbered parts in the diagram?

	Shoot	Root	Stem
A	1	2	3
B	3	1	2
C	2	1	3
D	2	3	1

10 The list below shows functions of parts of cells.

1. Protection of cell
2. Selectively permeable
3. Controls all cell activities
4. Contains chlorophyll

Which functions are **only** of parts found in a plant cell?

- A 1 and 2
- B 1 and 4
- C 3 and 2
- D 3 and 4 ✓

11 Which list correctly identifies the symbols of common atoms?

	Iron	Copper	Hydrogen	Carbon
A	Fe	C	H	Cu
B	Cu	Fe	H ₂ O	CO ₂
C	Fe	Cu	H	C
D	Cu	C	H ₂	Cu

12 If the substance A boils at 98°C and melts at -100°C, determine its state when the temperature is -130°C.

- A Solid
- B Liquid
- C Gas and Solid
- D Liquid and Gas**

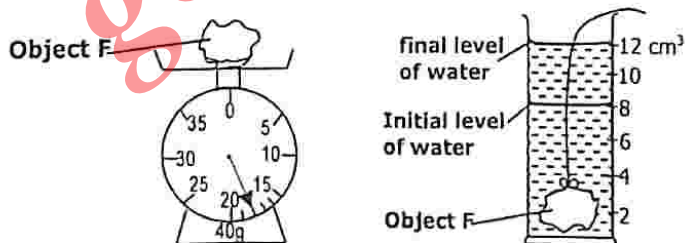
13 Which of the following methods of separating mixtures show a correct sequence that can be used to obtain pure salt from sea-water?

- A Evaporation → Sublimation → Distillation
- B Filtration → Evaporation → Crystallisation**
- C Evaporation → Chromatography → Crystallisation
- D Filtration → Chromatography → Sublimation

14 What is the weight of a packet of salt with a mass 500g? (Take acceleration due to gravity as 10N/kg)

- A 0.5N
- B 5.0N
- C 50.0N
- D 5 000.0N

15 Study the diagram below on determination of density.



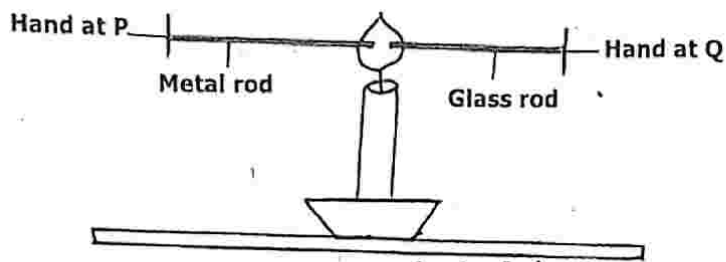
Calculate the density of object F. The density of F is ...

- A 1.5g/cm³
- B 2.5g/cm³
- C 4.0g/cm³
- D 4.5g/cm³**

$$\rho = \frac{m}{V} = \frac{13g}{3} = 4.33$$

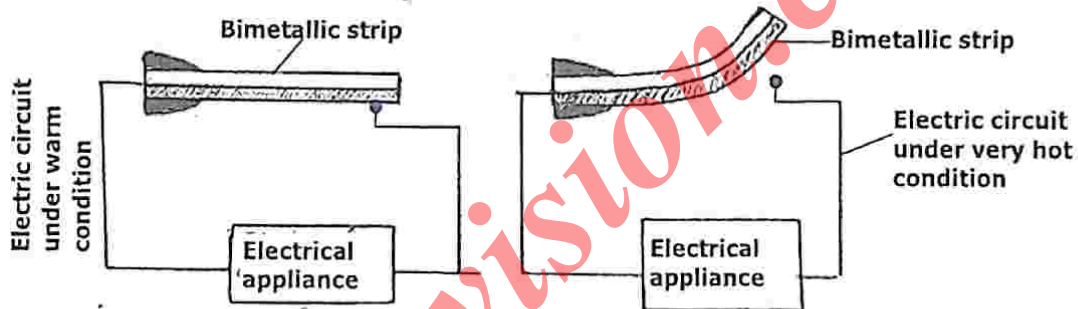
$$4.5 \text{ g/cm}^3$$

- 16 Study the diagram below on heat.



The hand at **P** feels the heat faster than that at **Q**. This is because ...

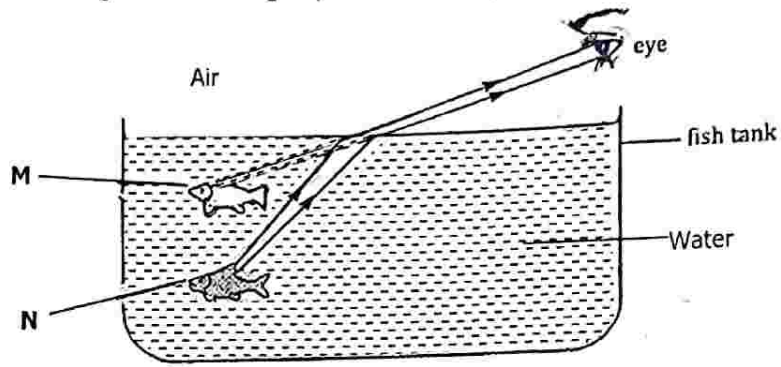
- A metal is a poor conductor of heat.
 - B glass is a good conductor of heat.
 - C metal is a good conductor of heat.
 - D glass is a better conductor of heat.
- 17 Study the diagrams below showing the bimetallic strip under warm condition and under very hot condition.



In which electrical appliance would such a type of circuit be used?

- A Computer
- B Electric fan
- C Electric pressing iron
- D Thermos flask

- 18 Study the diagram showing a person looking at a fish in a fish tank.

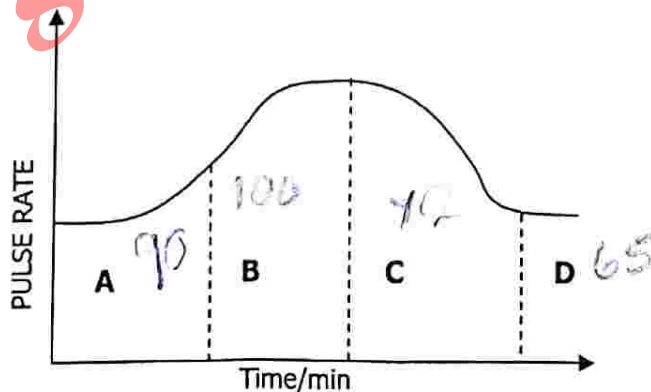


Which of the following statements is correct observation of the real position of the fish? The real position of the fish is ...

- A N because light is refracted as it moves from water to air.
 - B N because light travels in straight lines.
 - C M because light travels in straight lines.
 - D M because light is refracted as it moves from water to air.
- 19 Which of the following correctly describes the uses of oxygen, carbon dioxide and hydrogen?

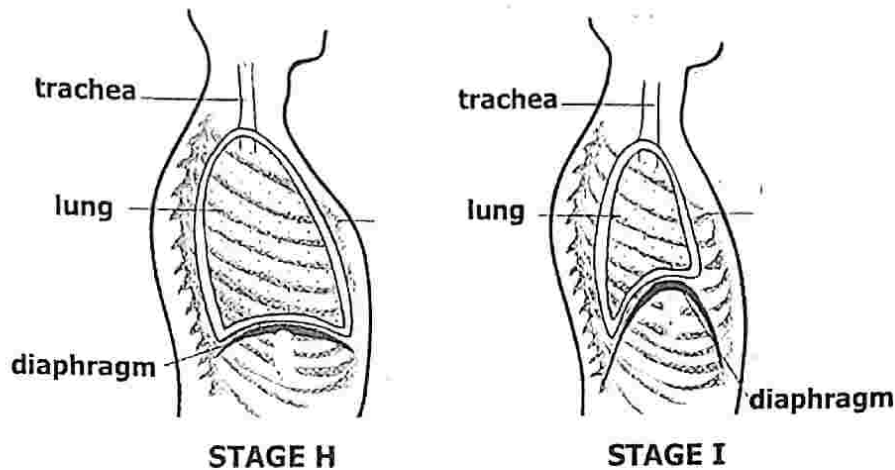
	Oxygen	Carbon dioxide	Hydrogen
A	Used in fizzy drinks	Hardening vegetable oils	Used in hospitals
B	Used in steel works	Used in fizzy drinks	Hardening vegetable oils
C	Hardening vegetable oils	Used in steel works	Used in fizzy drinks
D	Used in fire extinguishers	Used in fizzy drinks	Used in hospitals

- 20 The graph below shows the pulse rate of a person before, during and after an exercise.



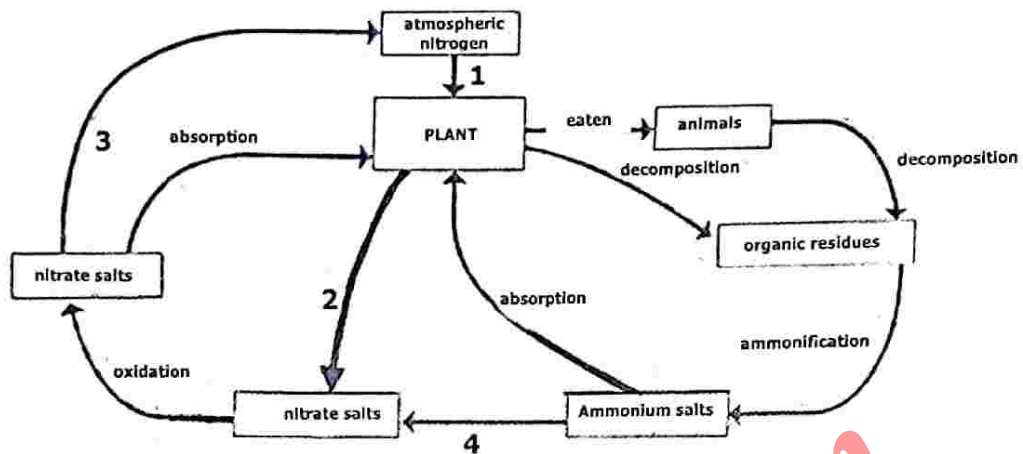
Which letter shows the period of exercising?

- 21 The diagrams below show stages in human respiration.



- Which of the stages correctly shows inspiration?
- A Stage H because the diaphragm is flattened.
 B Stage H because the lung space is reduced.
 C Stage I because the diaphragm is dome shaped.
 D Stage I because the lung space is increased.
- 22 Which of the following describes the best way of prevention of Sexually Transmitted Infections (STI's) among adolescents?
- A Consistence use of condoms.
 B Correct use of condoms.
 C Abstinence from sex until marriage.
 D Having sex with a faithful partner only.
- 23 Which of the following diseases is transmitted mainly through sexual intercourse?
- A Malaria
 B Syphilis
 C Typhoid
 D Scabies

24 The diagram below shows a cycle of the biosphere.



Identify processes 1, 2, 3 and 4.

	1	2	3	4
A	Lightning	Denitrification	Nitrification	Nitrogen fixation
B	Nitrification	Nitrogen fixation	Denitrification	Lightning
C	Denitrification	Nitrification	Lightning	Nitrogen fixation
D	Lightning	Nitrogen fixation	Denitrification	Nitrification

25 Which one of the reasons for good water management below does **not** help to maintain animal and plant life? Water for ...

- A agriculture purposes.
- B domestic supply.
- C fish farming.
- D recreation.

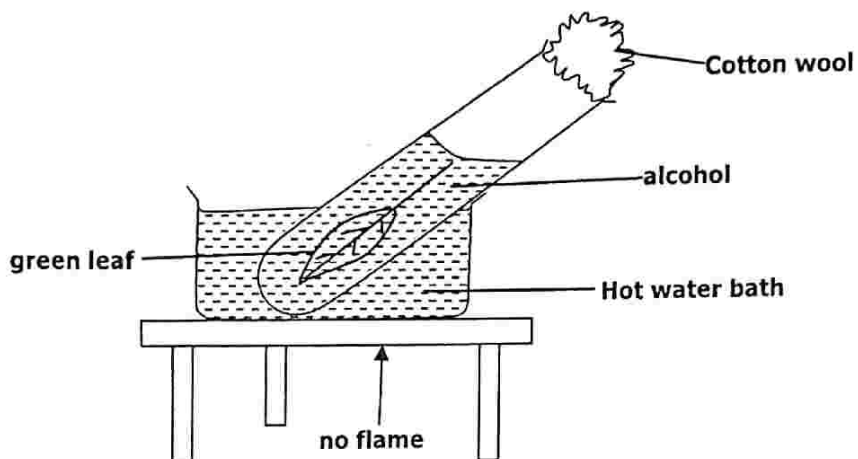
26 Below is a list of some animals domesticated by man.

- 1. Cattle
- 2. Cat
- 3. Sheep
- 4. Goat
- 5. Dog
- 6. Duck

Which two animals above are domesticated for milk production?

- A 1 and 3
- B 3 and 4
- C 4 and 6
- D 1 and 4

- 27 The diagram below shows a stage in testing a leaf for starch.



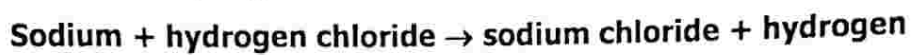
What is the purpose of the stage in the diagram?

- A Killing protoplasm
 B Removing chlorophyll
 C Making a leaf soft
 D Hardening the leaf
- 28 A student treated four identical leaves as follows:
- Leaf 1: Petroleum jelly was applied to both lower and upper surfaces.
 - Leaf 2: Petroleum jelly was applied only to lower surface.
 - Leaf 3: Petroleum jelly was applied only to upper surface.
 - Leaf 4: was left untreated.

Which leaf stays fresh for a long time?

- A 1
 B 2
 C 3
 D 4
- 29 The law that states that mass of a substance before a chemical reaction is equal to the total mass of the substances that are produced is called the law of ...
- A conservation of matter.
 B conservation of energy.
 C conversion of matter.
 D conversion of energy.

30 Sodium and hydrogen chloride react as shown in the chemical equation below.



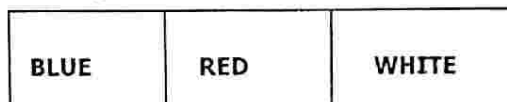
The type of chemical reaction shown in the equation above is called ...

- A** Synthesis
- B** Single replacement
- C** Double decomposition
- D** Double replacement

31 An object is placed 6cm from a bi-convex lens of focal length 2cm. Which statement below shows the nature of the image formed?

- A** Magnified, Real and Upright.
- B** Virtual, Upright and Diminished.
- C** Real, Upside down and Diminished.
- D** Virtual, Upside down and Same size as object.

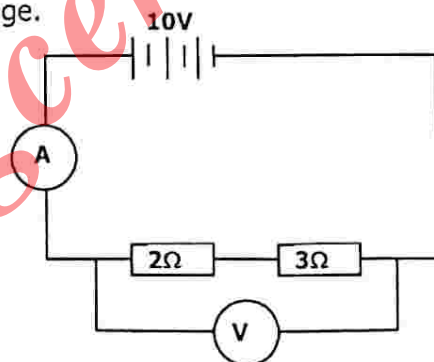
32 The diagram below shows a flag with three different colours.



If you looked at the flag through a piece of red glass, which of these colours would you see?

- A** Blue Red White
- B** Red Red Black
- C** Black Red Red
- D** Red Red Red

33 Study the diagram showing an experiment on the relationship between current and voltage.



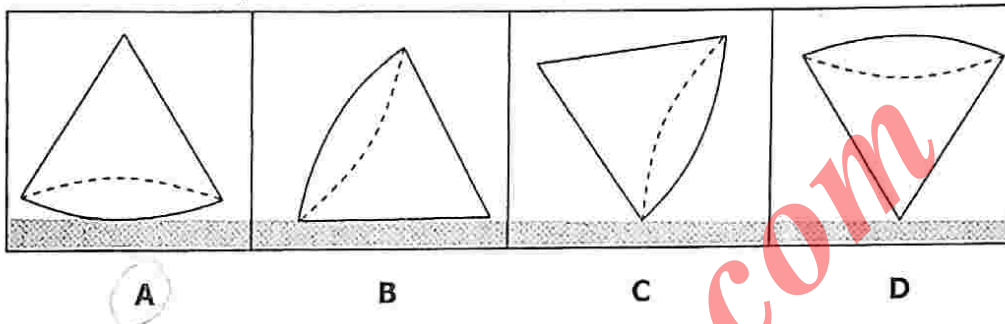
Calculate the current reading on the ammeter. The reading will be ...

- A** 2A
- B** 5A
- C** 10A
- D** 50A

34 Which of the following appliances used in the local environment converts electric current into both light and sound energy?

- A Heater
- B Cellphones
- C Electric fans
- D Energy saving bulbs

35 The diagrams below show the same cone placed in different positions on a surface. Which position exerts the most pressure on the surface?



36 Which one of the following is **not** the best way of conserving energy?

- A Re-use waste to generate energy.
- B Avoid using energy to avoid wasting.
- C Reduce the amount of energy wasted.
- D Recycle waste into new products.

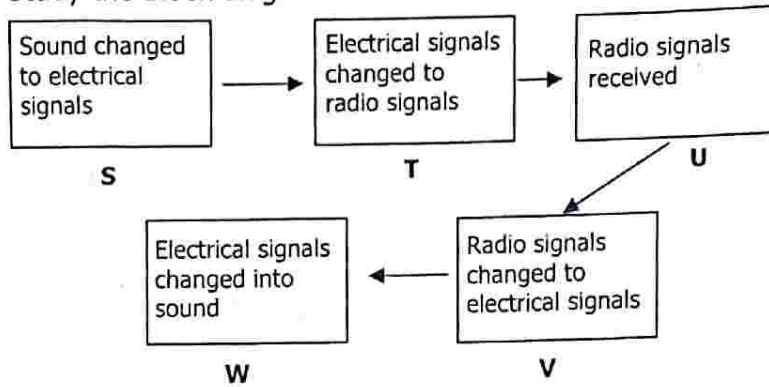
37 Which pair correctly shows communication using visual signals?

- A Smoke and telegraph
- B Traffic lights and letters
- C E-mail and messenger
- D Radio and heliograph

38 Which one is **not** an advantage of a method of sending information through text messaging using a cellphone?

- A It is cheaper than a phone call.
- B It is good for recording messages and their contents.
- C It's message can be read at any time.
- D It's messages are short.

39 Study the block diagram on communication shown below.



What communication devices are represented at **T** and **W**?

- | | T | W |
|----------|-------------|--------------|
| A | Microphone | Loud speaker |
| B | Microphone | Antenna |
| C | Transmitter | Loud speaker |
| D | Transmitter | Antenna |

40 A geostationary satellite is one which ...

- A** orbits in the atmosphere as it receives information.
- B** is stationed on earth as it transmits information.
- C** moves beyond the earth exploring the space.
- D** moves so as to remain in the same area above the earth.