

26a. State the name given to the sections of the Earth's crust that are slowly moving.

b. What is the name given to the line where tectonic plates meet?

c. What name is given to violent movement between two tectonic plates.

d. Earthquakes can happen under the ocean. State where these earthquakes are mostly like to occur under the ocean.

e. Earthquakes under the oceans can occur hundreds of kilometres from land. Explain how these earthquakes can result in damage on land.

27. The magnitude of an earthquake is measured on a times 10 scale.

a. How many times stronger is magnitude 5 than magnitude 4? _____

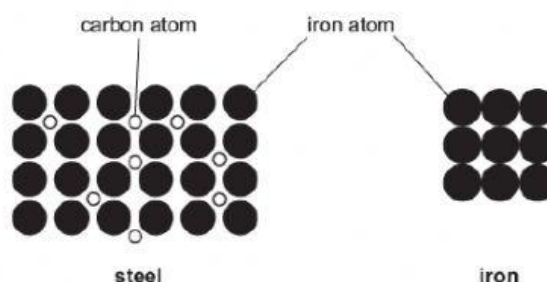
b. How many times stronger is magnitude 7 than magnitude 4? _____

c. How many times stronger is magnitude 8 than magnitude 6? _____

28. Steel is an alloy. It contains carbon and iron.

(a) Complete the sentence given below:

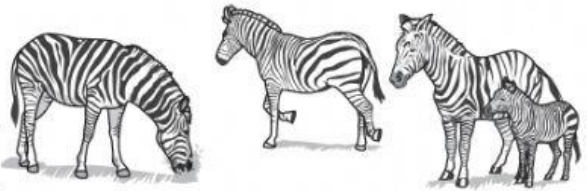
Steel is _____.



(b) Look at the particle models for steel and iron. Explain, using the particle model, why steel is harder than iron.

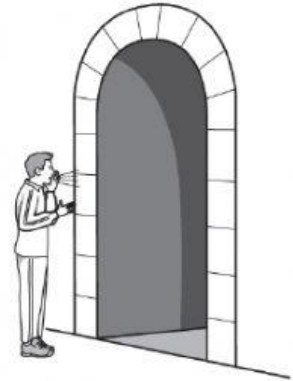
29. The mountain zebra belongs to the species, *Equus zebra*.

(a) Define the term species.



(b) Growth is one characteristic of living organisms. Write down three other characteristics of the living organisms shown in the pictures.

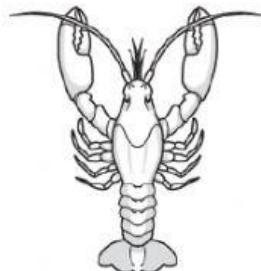
30. Hassan stands in the entrance of a tunnel and shouts his name into the tunnel. A few seconds later he hears his name again. Explain why.



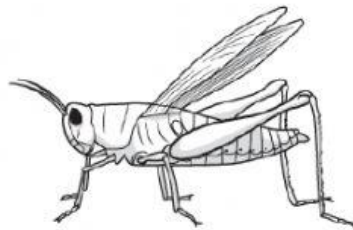
31. Look at the diagrams of the four arthropods, A, B, C and D.



A



B



C



D

Use the key to identify each arthropod. Write the letter of the correct arthropod next to its name.

Orconectes punctimanus _____

Cancer pagurus _____

Schistocerca gregaria _____

Enantiulus armatus _____

1a	has two claws	go to 2
1b	does not have claws	go to 3
2a	has a segmented tail	<i>Orconectes punctimanus</i>
2b	does not have a segmented tail	<i>Cancer pagurus</i>
3a	has wings	<i>Schistocerca gregaria</i>
3b	does not have wings	<i>Enantiulus armatus</i>

32. Angelique has bottles of four different solutions, W, X, Y and Z. The bottles have lost their names. She tests each solution with Universal Indicator. Here are her results.

solution	colour when Universal Indicator added
W	green
X	yellow
Y	purple
Z	red

- (a) Draw a line to match the correct solution to its name.

solution	name
W	sodium hydroxide (strongly alkaline)
X	distilled water (neutral)
Y	citric acid (weakly acidic)
Z	hydrochloric acid (strongly acidic)

- (b) Which hazard label is put onto a bottle containing a corrosive liquid?
Tick (✓) the correct box.


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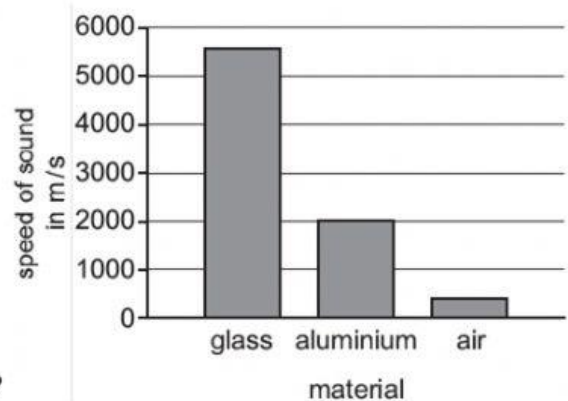
33. Ahmed finds this information about six substances. Use these properties to sort the six substances into metals and non-metals.

substance	property
A	high boiling point
B	low melting point
C	gas at room temperature
D	shiny
E	magnetic
F	ductile

metal	non-metal
E	

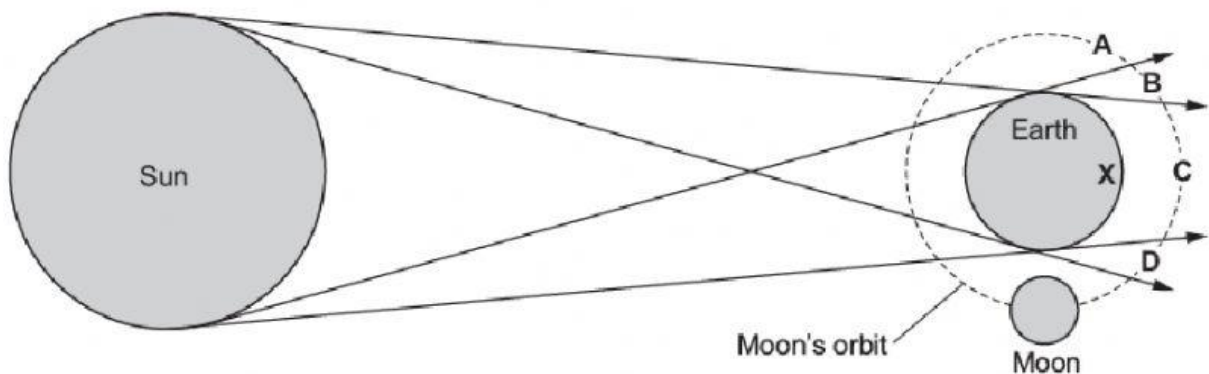
34. Look at the bar chart. It shows the speed of sound through different materials.

- (a) Suggest why sound travels quicker through glass than through air.



- (b) Sound does not travel in a vacuum. Explain why?

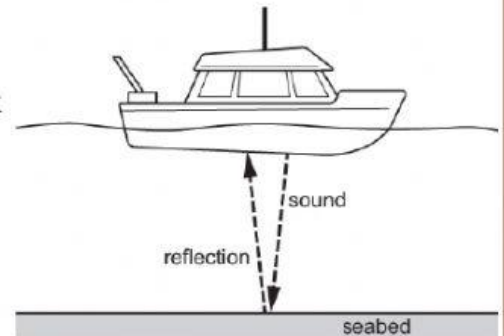
35. Look at the diagram showing the Moon orbiting the Earth and light rays from the Sun. A person stands at point X on the Earth. At which position on the Moon's orbit would the person see a total lunar eclipse? Explain your answer.



36. Sound is reflected by hard surfaces.

(a) What is the name given to a reflected sound? _____

(b) A ship is using sound to calculate the distance to the seabed. The ship produces a sound. The sound travels to the seabed and is reflected back to the ship.



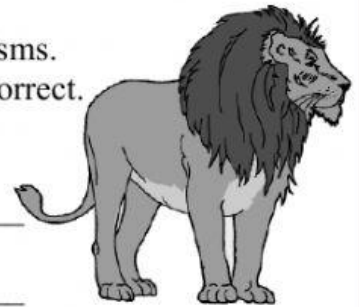
In water, sound travels a distance of 1500 m in one second. The reflected sound is detected after 4 seconds. Calculate the distance from the bottom of the ship to the seabed.

37. Medeyyah and AlReem are discussing living and non-living organisms.

(a) They both think that a lion is a living organism. They are both correct. Give two reasons why a lion is a living organism.

1. _____

2. _____



(b) Medeyyah thinks that a virus is a living organism. AlReem does not agree with Medeyyah. Explain why Medeyyah and AlReem both think they are correct.

good luck