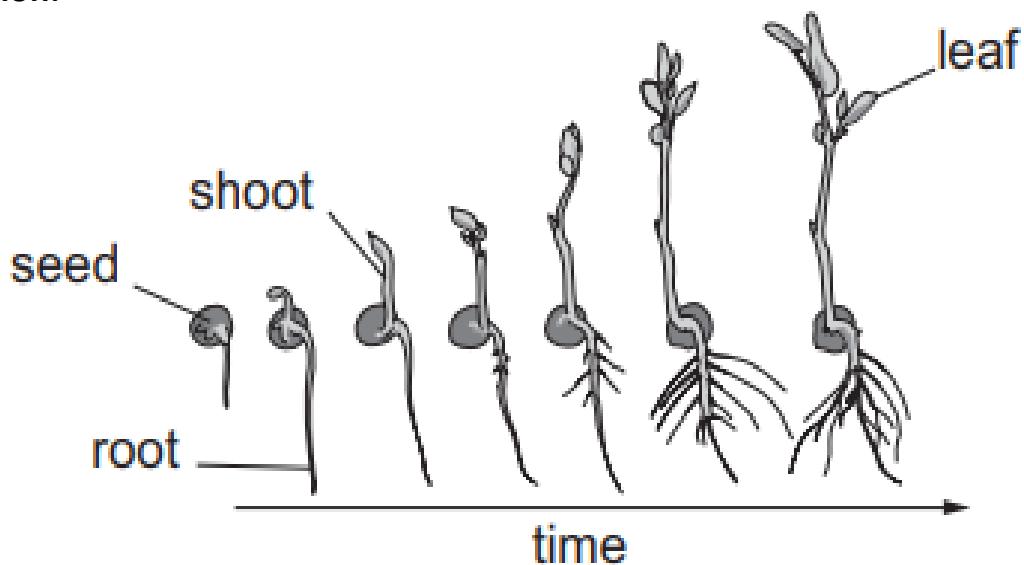




Q.1. Chloe investigates seed germination. She finds pictures on the internet to show germination.

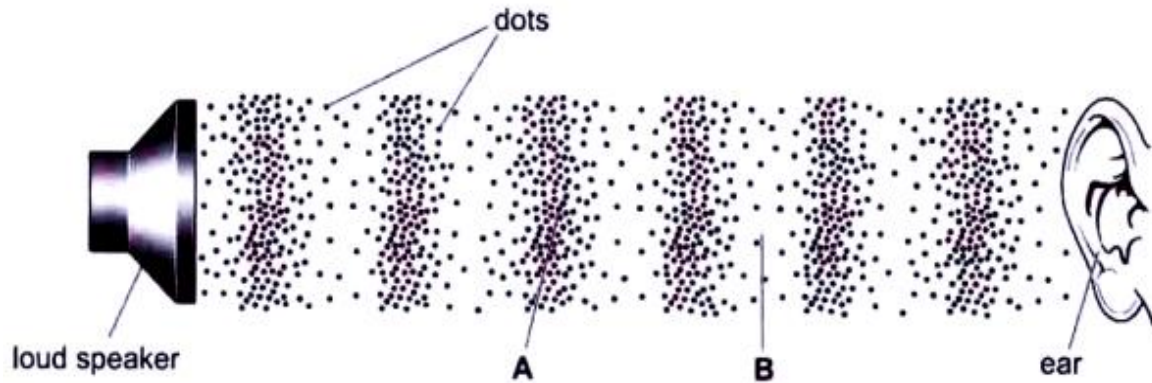


1. Use the diagrams to describe what happens to the seed. (3)

2. Write down two things she can measure to show germination has happened. (2)

3. What two conditions are needed for seeds to germinate? (1)

Q.2. Sound is made by a loudspeaker. The air particles move. Complete the sentences using words from: (5)



air, close together, compression, density, mass, far apart, pressure, rarefaction, solid, sound

- The dots on the diagram A are _____ particles.
- In area **A** the dots are _____
- This area is called a _____
- In area **B** the dots are _____
- This area is called a _____

Q.3. Ali investigates the loudness of some instruments. Here are his results.

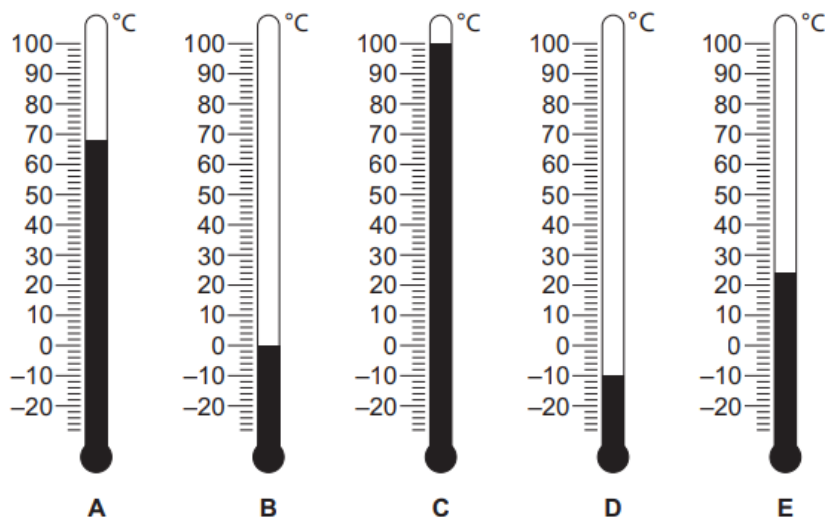
Instrument	Sound level
Cymbals	130
French horn	100
Piano	65
Trombone	85

- Which unit does Ali measure sound in? (1)

- What instrument has the loudest sound? (1)

- Which instrument is quieter than the trombone? (1)

Q.4. Thermometers are used to measure temperature.



a. Which thermometer shows the boiling point of water? Circle the answer. (1)



A B C D E

b. Which thermometer shows the melting point of ice? Circle the answer. (1)

A B C D E

c. One of the thermometers shows the lowest temperature. What is the lowest temperature shown? _____ °C. (1)

Q.5. The picture show different seeds. Draw a line from each seed to the way it is dispersed. (3)

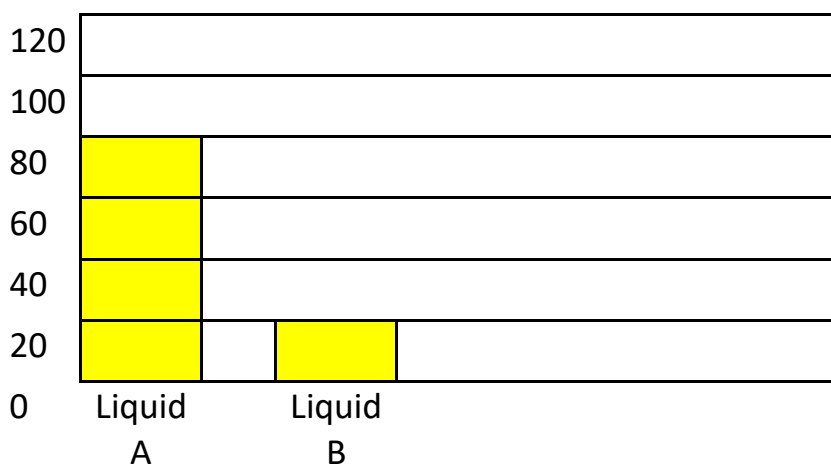
Seed	Dispersed
1.  blackberry	Burst open
2.  coconut	Eaten by birds
3.  violet	Float on water
4.  sycamore	Stick to animal

Q.6. Mia uses the internet to find out about the boiling points of some liquids. She writes the information in this table.

Liquid	Boiling point in °C
Liquid A	80
Liquid B	20
Liquid C	70
salt solution	110
Water	100

a. What happens to the boiling point of water when salt is added? (1)

b. Mia draws a bar chart of the boiling points. Complete the bar chart. Two bars have been done for you. (3)



c. Which liquid in the table has the lowest boiling point? (1)

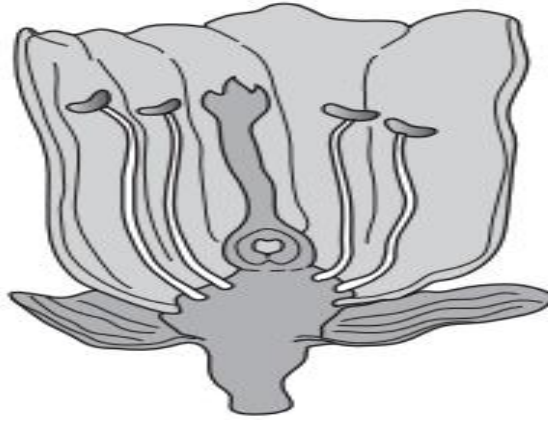
Q.6. Flowers have different parts. Here are the names of some parts of a flower.

(ANTHER, CARPEL, OVARY, PETAL, STAMEN, STIGMA)

a. Complete the table by writing each part in the correct column of the table. (4)

Female part	Male part	Not a male part and not a female part

b. Put the letter F on the flower to label a female part and M to label male part. (2)



Q.7. The table shows the lowest pitch and highest pitch of five musical instruments.

Musical instrument	Pitch in units	
	lowest	Highest
Clarinet	230	880
Guitar	40	990
Oboe	220	880
Trombone	110	440
Tuba	55	220

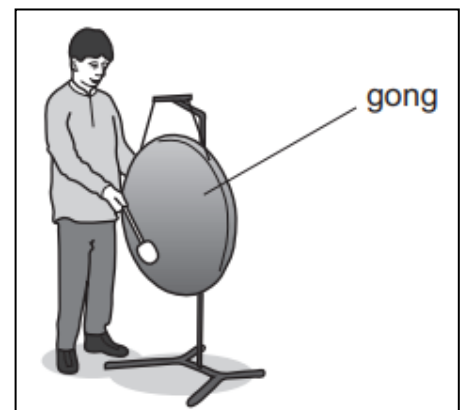
a. Which musical instrument has 220 units as its lowest pitch? (1)

b. What is the highest pitch of the trombone? (1)

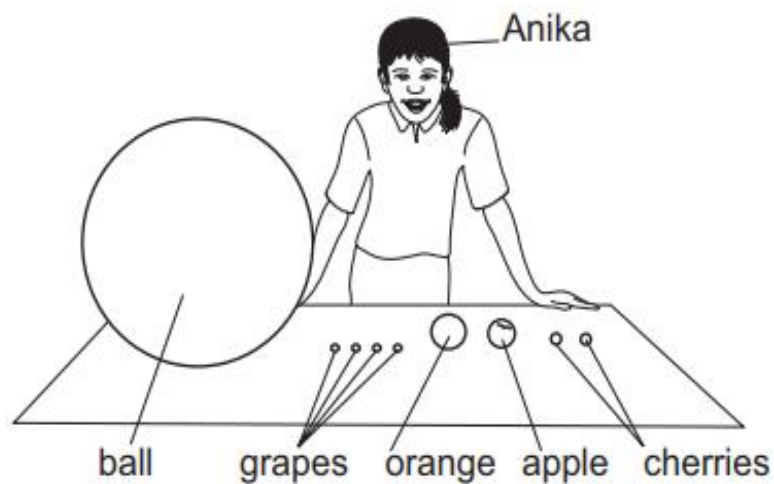
c. Which musical instrument has the largest difference in pitch? (1)

d. Look at the picture of a gong. Complete the sentences. (2)

When the gong is hit hard it makes a _____ sound. When the gong is hit with less force it makes a _____ sound.



Q.8. Anika makes a model of the solar system. She uses a ball as a model of the Sun. She uses an apple, an orange, some cherries and grapes as the planets.



a. Which part of the model must not move? (1)

b. The third grape from the ball is a model of the Earth.

1. Anika uses this grape to show what happens every 24 hours. Describe what Anika does. (1)

2. Anika uses the grape to show what happens every year. Describe what Anika does. (2)
