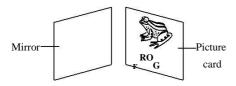
PRACTICE SET

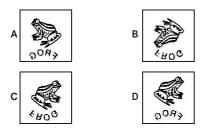


A Whole Content Based Test for Class 6th Science Asiad

1. Look at the diagram below.



Which one of the following shows the correct reflection of the picture card on the mirror?



2. Rahul and Shubham went for a school trip with their friends and school teachers. They reached at a place, where it was very cold.

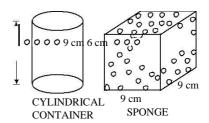
They saw many kinds of trees which are of coneshaped and their leaves were of needle-shaped, that were very different from the ones near their home. At which region they were for their trip?

- A Mountain region of Himalaya
- B Sea beach region of Gujarat
- C Plain region of Thar
- D None of the above
- **3.** The diagram shows a magnet that is being used to pick up a steel bar. The N-pole of the magnet is close to the centre Y of the steel bar as shown. What are the poles induced in the steel bar at X, Y and Z?



	Pole INDUCED (AT X)	POLE INDUCED (AT Y)	Pole INDUCED (AT Z)
Α	N	N	N
В	N	S	N
С	S	N	S
D	S	S	S

4. James was given a cube-like sponge and a cylindrical container. He was able to squeeze the whole sponge into the cylindrical container.



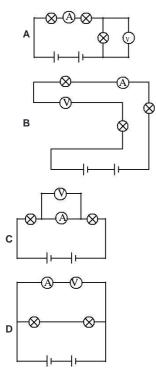
From the above experiment, he concluded that the sponge is

- A a liquid as its shape changes
- B a solid as have definite dimensions
- C a gas, as the shape and size both change
- D a liquid, as the shape and size both change
- **5.** Which of the following is incorrect?
 - I. Vitamin-D is synthesised by skin in our body.
 - II. Iodine is essential for the working of our thyroid gland.
 - III. Eating spinach is good for us, as it provides phosphorus in rich quantity.
 - IV. In take of folic acid causes anaemia.
 - V. Fats give more energy than that of carbohydrates.

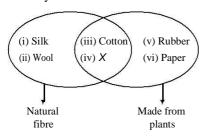
Codes

- A III and IV
- B III. IV and V
- C I, III and IV
- D I and IV

6. Which of the following shows the correct way of connecting an ammeter and a voltmeter?



7. Observe the given below diagram and identify the correct name for X.



Codes

- A Polyester
- **B** Coir
- **C** Cashmere
- D Nylon
- **8.** The pictures below show two different pairs of shoes.





shoes

Marie decides to wear the canvas track shoes rather than the wooden track shoes for the marathon. Which statement(s) would explain her choice of shoes?

- I. They are softer and therefore easier to jog with.
- II. They are transparent so that she can see, if her feet are suited for the shoes.
- III. They are waterproof.
- IV. They are handy and will last for a longer period of

Codes

A Only I

B II and III

C I and III

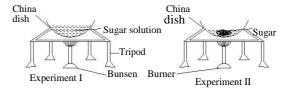
D I. II and IV

9. Consider the two groups of fibres

Group 1: Cotton, Jute, Flax Group 2: Fur, Leather, Silk

Which of the following can act as a basis of this grouping?

- A Air space inside fibres
- B Air space between fibres
- C Water absorption
- D The basis of their sources
- **10.** Rama took some sugar and dissolve some amount of it in water. She heated the solution formed in experiment I by taking it in a China dish. Then, she heated the sugar alone by taking it in a China dish in experiment II.

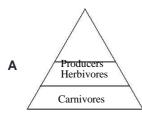


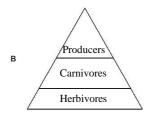
The correct statement about the changes occurring in the above two experiments is

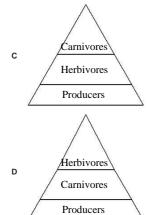
- A Experiment I involves a physical change whereas, experiment II involves a chemical
- B Experiment I involves a chemical change whereas experiment II involves a physical
- C Both the experiments involve a physical change
- D Both the experiments involve a chemical change

SCIENCE ASIAD CLASS VI

11. A food pyramid represents the relative amount of energy in the trophic levels. Which of the following correctly shows a food pyramid?





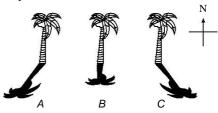


12. Match the column I with column II.

	Column I	Column II	
A.	Wheat	1. Sugarcane	
B.	Sugar	2. Cow, buffalo and goat	
C.	Kheer	3. Sheep, goat and chicken	
D.	Milk	4. Milk, rice and sugar	
E.	Meat	5. Edible part is seed	
		6. Rice grains and water	

Codes					
	Α	В	С	D	Ε
Α	6	2	3	5	4
В	6	4	1	2	3
С	5	1	2	4	3
D	5	1	4	2	3

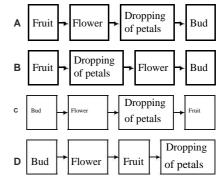
13. In the diagram shown below, Mohit studied the shadows of the coconut tree at different times in a day.



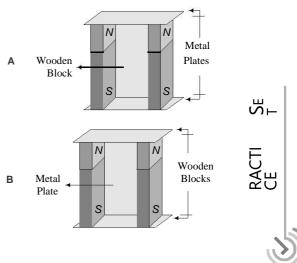
Which of the following options represent the timings correctly?

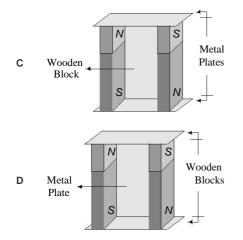
	A	В	C
Α	9 pm	12 pm	4 am
В	10 am	12 am	5 pm
С	10 pm	1 pm	5 am
D	10 am	12 pm	5 pm

14. Which of the following sequences represents the correct order in the formation of a fruit?

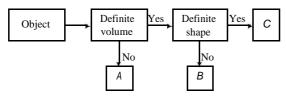


15. The following arrangements are set-up to store two bar magnets. Which one of them is the correct arrangement?





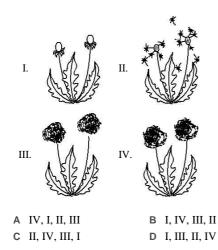
16. Study the flow chart below.



Which of the following rows has correctly identified the objects that belong to A, B and C?

Α	В	С
A Book	Air	Blood
B Water	Electricity	Oxygen
C Helium	Syrup	Vase
D Stapler	Cheese	Milk

17. Some of the stages in the development of dandelion are shown below, but they are out of order. What is the correct order of the pictures?



18. If a seed is inserted upside down, into in which direction will its stem and roots grow?

Stem	Root
AAway from the Earth	Towards the Earth
B Towards the Earth	Away from the Earth
CTowards the Earth	Towards the Earth
D Away from the Earth	Away from the Earth

19. Nitin conducted an experiment to see the effect of fertilisers on plants. He took three different plants.

To plant 1, he did not add any fertiliser. For 4 weeks, he added 10 g of fertiliser per day to plant 2 and 20 g of fertiliser to plant 3. The amount of sunlight, water and other conditions were kept the same for all the three plants. Nitin recorded his observations in a table.

Weeks	Height of Plant 1	Height of Plant 2	Height of Plant 3	
Week 1	3 cm	4 cm	5 cm	
Week 2	5 cm	7 cm	8 cm	
Week 3	8 cm	10 cm	11 cm	
Week 4	10 cm	15 cm	17 cm	

What conclusion can be drawn from the observations?

- A Fertilisers reduce the growth of plants.
- **B** Fertilisers have no effect on the growth of plants.
- **C** Fertilisers enhance the growth of plants.
- **D** None of the above
- **20.** The hands and legs are constructed in same pattern as described below.

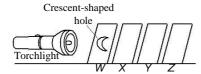
Parts of Hand	Parts of Leg	Number of Bones
1. Upper arm	Thigh	One long bone
2. Forearm	Lower leg	В
3. Wrist	Ankle	С
4. Palm	Foot	D
5. Fingers	Toe	Е

SCIENCE ASIAD CLASS VI

Identify B, C, D and E in the given table.

В	C	D	E
A 1 long bone	2 smaller bones	5 bones	Each has 3 small bones
B 1 long bone	3 smaller bones	5 muscles	3 large bones
c 2 long bones	Several small bones	5 bones	Each has 3 small bones
D 2 long bones	1 small bone	5 ligaments	3 large bones

21. Rohan cut out four sheets of the same size from four different materials; clear plastic, cardboard, frosted glass and metal. He then lined them in a straight line as shown below.



He also cut out a crescent-shaped hole from Sheet W. If he wanted to see a bright crescent-shaped patch of light on Sheet Y only, which one of the following shows the arrangement of the sheets correctly?

	W	X	Υ	Z
Α	Frosted glass	Metal	Cardboard	Clear plastic
В	Metal	Clear plastic	Frosted glass	Cardboard
С	Cardboard	Frosted glass	Metal	Clear plastic
D	Cardboard	Clear plastic	Metal	Frosted glass

Directions (Q. Nos. 22-25) Study the table given below and answer the questions that follow:

Р	Q	R	S
Pen	T-shirt	Notebooks	Fruits
Mug	Vest	Magazines	Vegetables
Toy car	Pants	Т	Medicines
Television	Saree	Books	Rubber

- **22.** In the given table, we can replace *P* by
 - A wood
- B plastic
- C paper
- D glass
- **23.** In the given table, we can replace R and T by
 - A paper and pens, respectively
 - B paper and cartons, respectively
 - C leather and magazine, respectively
 - D paper and cotton, respectively

- **24.** The things listed in column S tell us that
 - A these are obtained from plants
 - B plants are important for us
 - C plants have a root and shoot system
 - D Both (a) and (b)
- **25.** Which one of these items is made up of more than one material?
 - A Pen
 - B Mug
 - C Vest
 - D Saree
- **26.** Consider the statements given by three students.

Ujjawal There are over 600 muscles in our body and these muscles are classified as smooth muscles, special heart muscle and muscles attached to the bones.

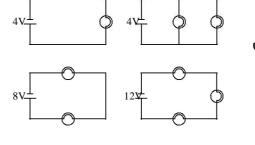
Rudra These muscles often work in opposition. Through their coordination of relaxation and contraction, the muscles allow the arm to bend and straighten.

Riya When we are straightening our arm, the set of muscles on the upper side contracts while the other set on the lower side will relax.

Which of the above students is saying wrong?

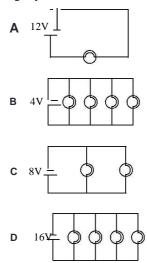
- A Ujjawal
- B Riya
- C Rudra
- D Rudra and Riya
- **27.** The brightness of an electric bulb depends on the amount of electrical energy converted into light energy. This electrical energy in turn depends on the amount of voltage (*V*) supplied.

The circuits shown below use identical bulbs which shine with equal brightness

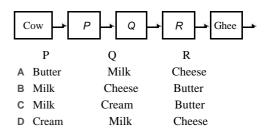


The circuits given in the options below also contains bulbs identical to those used in above circuits.

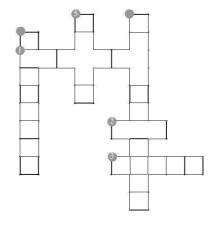
In which circuit do the bulbs shine as brightly as those in the circuits above?



- **28.** Geeta moves on a straight road from point A to point C. She takes 10 min to cover a certain distance AB and 20 min to cover the rest of distance BC. She then turns back and takes 20 min to cover the distance CB and 10 min to cover the rest of the distance to her starting point. She makes 4 rounds on the road in the same way. Her motion is
 - A only rectilinear
 - B only periodic
 - C both rectilinear and periodic
 - D neither rectilinear nor periodic
- **29.** Observe the given below flow chart, there are some steps missing which are labelled as *P*, *Q* and *R*. Identify them.



30. Solve the crossword with the help of given clues.



Across

- 1. Aquatic animal, do not possess streamlined body.
- 2. Have long hairs on its body to prevent itself from the cold.
- 3. Plants respond to

Down

- 4. Do not possess gills and breathe in air through blowholes or nostrils.
- 5. Can stay both in water as well as land. They have webbed feet.
- 6. All living organisms commonly possess

ANSWERS

- (d) A mirror forms virtual and laterally inverted images. So, the nose of the frog in the reflection should be pointing at the frog's nose in the picture card. The letters in the word 'FROG' should also face the opposite direction.
- 2. (a) All the characteristics of trees like cone-shaped needle-shaped leaves are indicating towards the adaptations of trees to protect themselves from the snowfall and heavy cold. Thus, the region where Rahul and Shubham goes for a trip would be mountain region of Himalaya and they were observing the trees such as pines, oak, etc, which are mostly found in Himalayan region.
 - (d) Pole induced at Y will be opposite to the pole of magnet brought near to it. Y will be S pole. Since,

- X, Y and Z all are on same side so, they all are S-pole and their opposite faces are N-pole.
- **4.** (d) Although sponge has definite dimension but it can be squeezed because of the presence of the air sacs (pores filled with air).
- **5.** (a) Eating spinach is good for us, as it provides iron in rich quantity. Folic acid intake cures the disease anaemia.
- (c) In an electric circuit ammeter is always connected in series with the circuit and a voltmeter is always connected in parallel with the circuit.
- **7.** (b) Coir is a natural fibre extracted from the husk of coconut. It is used in products such as floor mats, doormats, brushes, etc.
- **8.** (a)

SCIENCE OLYMPIAD CLASS VI

- (d) Group 1 involves cotton, jute and flax are plant products
 i.e. they are obtained from plant where as group 2
 involves fur, leather and silk which are obtained from
 animals or insects.
- 10. (a) When sugar solution is heated, water evaporates, so only physical change takes place. However, when sugar is heated alone, first it loses water molecules and result in the formation of a new substance and turns black. So, it is a chemical change.
- (c) An energy pyramid is a graphical structure of energy flow in a community. The energy flow occurs from bottom to up.

Producers (plants) bring energy from non-living sources. Animals that eat only plants are called herbivores and animals that eat other animals called carnivores.

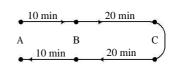
12. (d) Wheat is the edible part of wheat plant, i.e. seed. Sugar is obtained from sugarcane.

For preparing kheer, we need milk, rice and sugar.

Milk is obtained from cow, buffalo, goat. Meat is obtained from sheep, goat and chicken.

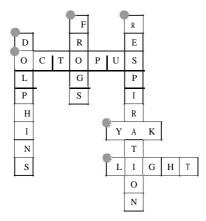
- 13. (d) The sun rises in the east. Hence, the shadow is cast towards the west. Since, the shadow of tree A lies in the west, the time should be around morning. The shadow of the tree is the shortest during noon which can be shown for tree B. The shadow of tree C lies in the east and the time should be around late afternoon to evening.
- **14.** (c)
- 15. (c) Magnets should be kept in pairs with their unlike poles on the same side. Their ends must be shielded by metallic plates and they should be separated from each other using a piece of wood.
- **16.** (c) *A* neither has definte volume nor definite shape, i.e. it is a gas e.g. helium. In case of *B* volume is definite but shape does not, so it is a liquid e.g. syrup. *C* is a solid like vase with definite shape and definite volume.
- **17.** (b)
- 18. (a) As we know very well that the roots of a plant will move towards the earth because they are positively geotrophic and stem are negatively geotrophic. Thus, they will grow oppositely from the earth surface.
- **19.** (c) Fertilisers enhance the growth of plants as observed from the observations of the table.

- **20.** (c) Forearm and lower leg has 2 long bones. Wrist and ankle has several small bones. Palm and foot has 5 bones.
 - Fingers and toe are composed of 3 large bones.
- 21. (d) Since, the question only asks that the crescent-shaped patch of light be formed on Sheet Y, we should concentrate on identifying the type of materials for Sheets W, X and Y. In order to have the bright crescent shape on sheet Y, Sheet X must be transparent while sheet Y must be opaque as it will prevent the light from passing through to reach Sheet Z. Moreover, Sheet W must be translucent allowing only the light to pass through the hole. Clear plastic sheet is chosen to be Sheet X as it is transparent while metal which is opaque is chosen to be Sheet Y. The frosted glass allows some light to pass through. Hence, it is placed at the back.
- 22. (b) Because all these things are made up of plastics.
- 23. (b) R = Paper, T = Cartons. As all the items are made up of paper.
- **24.** (a) Because all the mentioned items are obtained from the plants.
- 25. (a)
- **26.** (b) **27.** (b)
- **28.** (c)



She is moving in rectilinear motion. Since, she repeats her walk on the same path which shows she possesses periodic motion also.

- **29.** (c) Cow produces milk, from which cream is obtained. After processing, cream provides butter.
- 30.



DRACTICE SET