

*New*

# Vision of **SCIENCE**

## Teacher's Manual





are not fixed to the bottom.

**Fixed plants** – Hollow stems & broad bones.

are fixed to the ground.

Under water plants – roots are fixed to the ground flexible stem.

5. pg 17.

6. Toadstool & Mashroom.

### **HOTS**

1. Because they respire and prepare food in the same manner as terrestrial plants.
2. The roots won't have any access to air.
3. To reduce loss of water.

### **VBQ**

1. useful.

2. environment friendly.

### **National Cyber Olympiad Questions**

1. (b).

## **CHAPTER 3**

### **Get, Set & go**

Elephant – calf.

Hen – Chick.

Sheep – Lamb.

Duck – Duckling

### **Let's find**

Ostrich 15 cm long & 13 cm wide.

### **Let's find**

For better chances of some of the babies to survive.

### **Life skills**

Dog – 12-13 years

Butterfly – 1 few months

Monkey – 20 years

Kangaroo – 8-12 years

Pigeon – 6 years

### **Exercise**

- A. 1. (b), 2. (b), 3. (c), 4. (a), 5. (c).  
B. 1. lifespan, embryo, 3. metamorphoses, 4. nymph, 5. mammals.  
C. 1. T, 2. F, 3. F, 4. T, 5. T.  
D. 1. –(c), 2. (d), 3. (b), 4. (e), 5. (a).  
E. 1. pg 23, 2. pg 24, 3. pg 25, 4. pg 26, 5. pg 27.

### **HOTS**

1. Since no new life arises, all species will die and life as we know it, will come to an end.
2. Both are mammals.

### **NCOQ**

1. (b),                      2. (a).

## CHAPTER 4

### Get, Set & go

Desert,      Tree      Water.

### Let's find

Dinosaurs were giant reptiles who lived millions of years ago. They died out due to climate change and may be a cataclysm involving a meteor.

### Let's find

It is an adaptation of the nose. It helps the animals to pick foliage and drink water without much strain.

### Exercise

- A. 1. (a), 2. (b), 3. (c), 4. (a), 5. (b).  
B. 1. Crawl, 2. fins, 3. spin, 4. arboreal, 5. herbivores.  
C. 1. T, 2. T, 3. T, 4. T, 5. T.  
D. 2. –(e), 2. –(d), 3. –(b), 4. –(a), 5. –(c).  
E. 1. pg 31, 2. 32.,  
3. Herbivores (plant), carnivores (Flesh), omnivores (flesh & plant) & parasite (depend on the organism).  
4. 36, 5. pg 37.

### HOTS

1. These features help can ruffling.  
2. Because they hibernate.

### VBQ

Corbett National Park      Bandipur National Park  
Nagarhole National Park      Sariska National Park  
Sundarbans National Park      Bandhngarh National Park  
Crir National Park      Periyar National Park

### National Cyber Olympiad Questions

1. (d),                      2. (a),                      3. (d).

## CHAPTER 5

### Get, Set & go

2. Rice,                      3. Corn,                      4. Egg.

### Let's find

It's regarded as a complete food because of contains protein, fat, carbohydrates, vitamins & minerals, which are essential for sustaining life.

**Let's find**

Apple Jam.

**Life Skills**

Water helps indigestion, Water maintain body temp, Water maintains blood pressure.

**Exercise**

- A. 1. (b), 2. (b), 3. (a), 4. (c), 5. (a).  
B. 1. food, 2. five, 3. carbohydrates, 4. water, 5. strong.  
C. 1. T, 2. T, 3. F, 4. T, 5. t.  
D. 1. -(c), 2. -(a), 3. -(d), 4. -(e), 5. -(b).  
E. 1. pg 41, 2. Gives energy to do work, (b) helps us to grow, (c) helps our body to fight against diseases, 3. pg 43, 4. pg 44, 5. pg 44.

**HOTS**

1. To help the body grow.
2. Food gives us energy to work & play & protect against diseases.
3. a. Balance diet in form of milk.  
b. Diet containing more carbohydrates.

**VBQ**

Make preeti eat a balanced diet and make food via health cooking.

**NCOQ**

1. (a), 2. (a).

**CHAPTER 6****Let's find**

To make sure germs travel from our hands to our food.

**Exercise**

- A. 1. (a), 2. (e), 3. (a), 4. (c), 5. (a).  
B. 1. Permanent, 2. Denture, 3. Canines, 4. Premolar, 5. Small.  
C. 1. T, 2. F, 3. F, 4. T, 5. T.  
D. 1. -(b), 2. -(a), 3. -(c), 4. -(e), 5. -(d).  
E. 1. Permanent & Milk teeth.  
2. pg 49, 3. Incisors, canines, premolar & molars.  
4. pg. 51, 5. pg 52.

**HOTS**

1. She has sensitive teeth.
2. So that the food does not get stuck in the food pipe while

swallowing.

3. They can cause marrious diseases.

**NCOQ**

(b)

## CHAPTER 7

### Exercise

A. 1. (a), 2. (b), 3. (c), 4. (c), 5. (c).

B. 1. Seat, 2. Natural, 3. detergent, 4. woolen, 5. rayon.

C. 1. F, 2. T, 3. F, 4. T, 5. T.

D. 1. -(d), 2. -(c), 3. -(e), 4. -(b), 5. -(a).

E. 1. pg 57, 2. pg 58, 3. pg 58

4. Natural fibers – cotton & zute.

Synthetic fibers – rayon & Nylon.

5. pg 59.

F. Doctor

Soldier

A d v o c a t e

Student.

**HOTS**

The clothes might have belonged to a sick person & was not landed properly.

**UBQ**

It is correct mother compassionate and cares about others.

**NCOQ**

1. (c),

2. (d).

## CHAPTER 8

**Let's find**

Because of Sea breeze.

**Let's find**

Water used to be boiled before consumption.

### Exercise

A. 1. (b), 2. (a), 3. (a), 4. (a).

B. 1. Sun, 2. wind, 3. evaporation, 4. frost, 5. Boiling.

C. 1. T, 2. F, 3. F, 4. T, 5. T.

D. 1. -(b), 2. -(d), 3. -(e), 4. -(c), 5. -(a).

E. 1. pg 63, 2. pg 64, 3. pg 66, 4. pg 66, 5. pg 68.

**HOTS**

1. The water vapour is our breath condenses to form very tiny drops of water.

2. The air, outside, is very humid during monsoons.
3. Evaporations is the process in which liquid H<sub>2</sub>O is converted to vapour form.

Condensation is the process in which vapour form of H<sub>2</sub>O converts to liquid form.

**VBQ**

1. (c),
2. (a).

**NCOQ**

1. (c),
2. (c).

**CHAPTER 9**

**Get, Set & go**

Planet, Sun & Galaxies pie.

**Let's find**

Because Venus atmosphere traps immense heat during the day.

**Let's find**

Days and night will remain constant, never changing. Every hemisphere will have a constant, never changing season as well.

**Exercise**

- A. 1. (a), 2. (a), 3. (b), 4. (a), 5. (b).
- B. 1. Sun, 2. Earth, 3. Uranus, 4. 24, 5. 5.
- C. 1. T, 2. F, 3. T, 4. F, 5. T.
- D. 1. –(c), 2. –(e), 3. –(a), 4. –(b), 5. –(d) Mars.
- E. 1. pg 72, 2. pg 72, 3. pg 72, 4. pg 75, 5. pg 75, 6. pg 75.
- F. Crust, Mantle Outer core Inner core

**HOTS**

1. From space, Earth is seen as a blue planet.
2. Earth is the only planet with known living organisms Hence, it is unique.

**VBQ**

It is always wrong to judge people.

**Activity**

4. Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune.

**NCOQ**

1. (d),
2. (c).

**CHAPTER 10**

**Let's find**

Loamy soil

**Life Skills**

Restrict deforestation, over grazing, mining, pollution by industrial & domestic effluent.

Plant more trees.

Encourage mixed farming.

Discourage use of pesticides and insecticides.

**Exercise**

- A. 1. (a), 2. (a), 3. (b), 4. (a), 5. (b).  
 B. 1. Soil, 2. Sandy soil, 3. large soil, 4. plants, 5. bedrock.  
 C. 1. T, 2. F, 3. T, 4. T, 5. T.  
 D. 1. -(b), 2. -(c) 3. -(d), 4. -(e), 5. -(a).  
 E. 1. pg 81, 2. pg 82, pg 82.

**HOTS**

- wind and water bring smaller particles with them which collide with rocks and boulders. The pressure of water also accelerates the breaking down of big rocks.
- Very much soil helps us to prewgraw food, make terms, and sustain life.

**VBQ**

eroded, environment friendly, responsible.

**Activity**

3. pg 83.

**NCOQ**

- (d),
- (d).

**CHAPTER 11****Get, Set & go**

All

**Let's find**

Hot air is less dense and tendstorise.

**Let's find**

Rock salt is obtained via elaboration of sea water and purified to make table salt.

**Exercise**

- A. 1. (a), 2. (b), 3. (a), 4. (b), 5. (b).  
 B. 1. matter, 2. solid, 3. liquid, 4. solid, 5. soluble.



- C. 1. -(e), 2. -(d) 3. -(b), 4. -(c), 5. -(a).  
 D. 1. T, 2. F, 3. T, 4. F, 5. F.  
 E. 1. pg 87, 2. pg 87, 3. pg 87, 4. pg 89, 5. pg 89.  
 F. Solid, solid, liquid, solid, liquid, gaseous, solid, solid.

**HOTS**

1. Perform occupies the space of to given like gases do.
2. Gas occupies whatever space it si given.

**VBQ**

- |         |              |
|---------|--------------|
| 1. (c), | 2. (b), NCOQ |
| 1. (d), | 2. (b).      |

**CHAPTER 12**

**Get, Set & go**

Pull, Push

**Let's find**

yes, it is 1/6th of earth's gravity.

**Let's find**

Gravity pulls at an angle on a slope and is flat more prominintly as the slope increases.

**Exercise**

- A. 1. (a), 2. (c), 3. (b), 4. (b), 5. (a).  
 B. 1. force, 2. Gravity, 3. Fiction, 4. Sun, 5. Work.  
 C. 1. F, 2. T, 3. T, 4. T, 5. T. D. 1. -(c), 2. -(d), 3. -(c), 4. -(b), 5. -(a).  
 E. 1. pg 98, 2. pg 98, 3. (a) work is done when an object is moved through a distance by applying force on it.  
     (b) Force is a push or pull.  
     (c) Energy is the ability to do work.  
 4. pg 97.

**HOTS**

1. Pushing a wall is no work as the object has not moved through any distance.
2. Since the spaces suits are stiff, astronauts hop.

**UBQ**

- |                      |                        |
|----------------------|------------------------|
| 1. fore of friction, | 2. caring & concerned. |
|----------------------|------------------------|

**NCOQ**

- |         |         |
|---------|---------|
| 1. (b), | 2. (b). |
|---------|---------|

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