



**Delhi Public School, Gandhinagar**  
**OLYMPIAD SAMPLE PAPER**

**Class IV**

**SCIENCE**

**Date:**

**Time: 2 hours**

**M. Marks: 50**

**Name: \_\_\_\_\_ Sec: \_\_\_\_\_ Roll No.: \_\_\_\_\_**

**MENTAL ABILITY**

**1. Which of the following cannot roll and slide?**

- A. Cube                      B. Cone                      C. Sphere                      D. Cylinder

**2. Number Series:**

**What comes next in the series?**

2, 6, 12, 20, 30, ?

- A. 42                      B. 40                      C. 36                      D. 32

**3. Direction Sense:**

**Priya faces North. She turns 90° to her right, then 180° to her left. Which direction is she facing now?**

- A. East                      B. North                      C. West                      D. South

**4. Mirror Image:**

**Which of these words will look the same in a mirror?**

- A. MOM                      B. TOP                      C. DOG                      D. HAT

**5. The code for some letters are given below.**

Letters	C	F	S	A	R	H	O	E
Codes	*	?	#	!	x	@	/	\$

**Find the code for SCORE**

- A. #\*/x\$                      B. #\*/x!                      C. #\*/!/?\$                      D. ?#/!x\$

**6. If day after tomorrow will be Sunday, then \_\_\_\_\_ will be seventh day from today.**

- A. Friday                      B. Sunday                      C. Wednesday                      D. Thursday

**7. Neeraj correctly remembers that date of his dance competition falls after 8<sup>th</sup> September and before 12<sup>th</sup> September. His sister correctly remembers that the date is an even number. What will be the date of Neeraj's dance competition?**

- A. 9<sup>th</sup> September                      B. 11<sup>th</sup> September                      C. 10<sup>th</sup> September                      D. 8<sup>th</sup> September

**SCIENCE**

**8. Which of the following animals is *cold-blooded*, lays eggs, and lives both on land and in water?**

- A. Cat                      B. Whale                      C. Frog                      D. Crocodile

**9. Who am I? Read the clues and answer-**

- I am a mammal.
- I live in water but breathe through lungs.
- I give birth to young ones.
- I have a blowhole.

- A. Octopus                      B. Shark                      C. Crocodile                      D. Dolphin

**10. A scientist observes a life cycle as: Egg → Caterpillar → Pupa → Adult**

**Which animal could it be?**

- A. Frog                      B. Dog                      C. Butterfly                      D. Hen

**11. A boy was sweating after playing football. What could be the reason for this?**

- A. The body was trying to cool itself.                      B. The body was absorbing water.  
C. The skin was getting warmer.                      D. The sweat glands stopped working.

**12. A lizard can stick to walls easily because:**

- A. Its tail supports the body.                      B. Its claws dig into the wall.  
C. It has hooks on its legs.                      D. It has feet that create grip.

**13. Observe the table and answer the question.**

Animal	Body Covering	Breathing Organ	Method of Reproduction
Fish	Scales	Gills	Lays eggs
Frog	Moist skin	Lungs & skin	Lays eggs
Cat	Fur	Lungs	Gives birth
Snake	Scales	Lungs	Lays eggs

**Which two animals show both similarities and differences in reproduction and breathing organs respectively?**

- A. Frog and Cat                      B. Cat and Snake                      C. Fish and Cat                      D. Fish and Frog

**14. Read the passage and answer the question.**

*A camel can walk easily on desert sand without sinking. It also lives for days without water and stores fat in its hump.*

**Which of these is NOT an adaptation of the camel for desert life?**

- A. Padded feet to walk on sand
- B. Thick fur on body to stay warm
- C. Hump that stores fat
- D. Long eyelashes to protect eyes from sand

**15. Match the animals with their type of reproduction:**

Animal	Reproduction Type
Cow	a. Lays eggs
Snake	b. Gives birth
Hen	
Dog	

- A. Cow – b, Snake – a, Hen – a, Dog – b
- B. Cow – a, Snake – a, Hen – b, Dog – b
- C. Cow – a, Snake – b, Hen – a, Dog – a
- D. Cow – b, Snake – b, Hen – b, Dog – a

**16. Which of these shows correct order in the life cycle of a frog?**

- A. Egg → Tadpole → Frog
- B. Tadpole → Frog → Egg
- C. Tadpole → Egg → Frog
- D. Egg → Frog → Tadpole

**17. Which of the following situations best shows potential energy being converted into kinetic energy?**

- A. A rolling ball slowing down
- B. A lifted stone falling to the ground
- C. A stretched rubber band lying on the table
- D. A battery kept in a drawer

**18. Choose the correct statement about how energy changes forms:**

- A. Mixer converts heat energy into sound energy
- B. Solar panel converts light energy into electrical energy
- C. Bulb converts light energy into electrical energy
- D. Fan converts mechanical energy into electrical energy

**19. Identify the machine that involves combination of more than one simple machine:**

- A. Knife
- B. Scissors
- C. Ramp
- D. Screw

**20. What energy transformation occurs in the following case?**

**A windmill turning a generator to power a light bulb.**

- |                            |                            |
|----------------------------|----------------------------|
| A. Electrical → Mechanical | B. Mechanical → Electrical |
| C. Wind → Heat             | D. Kinetic → Chemical      |

**21. A scientist observed this cycle:**

**Day: Wind blows from sea to land**

**Night: Wind blows from land to sea What conclusion can be drawn?**

- A. Wind only blows when the Sun shines
- B. Rain causes these breezes
- C. Temperature differences create pressure changes that cause breezes
- D. Moon pulls air at night

**22. Identify the correct sequence of steps to purify muddy river water at home:**

- A. Sedimentation → Filtration → Boiling
- B. Filtration → Sedimentation → Boiling
- C. Boiling → Filtration → Sedimentation
- D. Filtration → Boiling only

**23. Read the passage and answer:**

**In a forest, some deer died due to a water shortage. As a result, a few tigers also started dying. Which of the following explains this best?**

- |                                   |   |
|-----------------------------------|---|
| A. Tigers ate too much            | B. Trees stopped growing                                  |
| C. The sun was too hot for tigers | D. Water shortage affected prey, which affected predators |

**24. Which of the following is an example of reduce from the 3Rs (Reduce, Reuse, Recycle)?**

- A. Using old jars to store food
- B. Carrying your own cloth bag instead of using new plastic bags every time
- C. Melting used cans to make new ones
- D. Turning waste paper into fresh sheets

**25. Study the given relationship.**

**Duckweed: Lotus: Tapegrass**

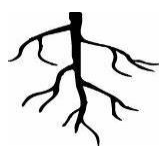
**Select the option which satisfies the same relationship.**

- A. Hydrilla: Water lettuce: Lemon grass
- B. Water hyacinth: Water lily: Hydrilla
- C. Lemon grass: Water lily: Lemna
- D. Hydrilla: Water hyacinth: Lemon grass

**26. Sohan does a lot of physical work. Neha has low immunity and falls ill frequently. Nidhi often complains of constipation. Nupur is shorter than other girls of her age. Unscramble the given groups of letter to get name of the nutrient, the person needs more and select the correct option.**

- A. Sohan- LEIMNRAS   B. Nidhi- TAFS   C. Nupur – EGAHROUG   D. Neha - TAMNIVIS**

**27. Refer to the given figures, X and Y and select the INCORRECT statement regarding them.**



**X**



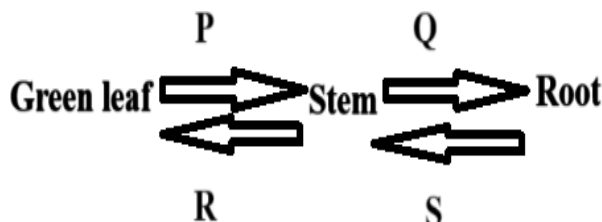
**Y**

- A. X has one main root whereas Y has no main root.
- B. X is a tap root whereas Y is a fibrous root.
- C. Bean and mustard have Y type of root whereas onion and wheat have X type of root.
- D. None of these

**28. Fibre X is obtained from the stem of a plant while fibre Y is obtained from an insect. Fibres X and Y are respectively.**

- A. Jute, Wool                      B. Linen, Silk                      C. Cotton, Silk                      D. Jute, Linen

**29. Refer to the given flow chart.**



**Which of the following represents the substances P, Q, R and S?**

- A. P-Water, Q- Food, R- Water, S-Food  
 B. P-Water, Q- Water, R- Food, S-Food  
 C. P-Food, Q- Food, R- Water, S-Water  
 D. P-Food, Q- Water, R- Water, S-Food

**30. Select the correct option.**

- A. Solute + Solution = Solvent                      B. Solvent + Solution = Solution  
 C. Solvent - Solute = Solution                      D. Solvent + Solute = Solution

**31. Read the given sentence and select the option that correctly fills in the blanks.**

**Men of Maharashtra occasionally wear a turban called (i) and the women of Maharashtra wear saree known as (ii) saree.**

- A. (i) – Pheta, (ii)- Nauvari                      B. (i) – Mundu, (ii)- Lungi  
 C. (i) – Pheta, (ii)- Mundu                      D. (i) – Kediya, (ii)- Dhoti

**32. Which of these Indian festivals is NOT linked to the phases of Moon?**

- A. Diwali                      B. Eid                      C. Baisakhi                      D. Karvachauth

**33. Match the given columns and select the correct option.**

Column I	Column II
(a) Stomach	(i) Secretes saliva
(b) Small intestine	(ii) Does not digest any type of food
(c) Large intestine	(iii) Receives digestive juices from pancreas
(d) Mouth	(iv) Breaks down proteins into simpler substance

- A. (a)-(iv), (b)- (i), (c)- (ii), (d)- (iii)                      B. (a)-(iii), (b)- (i), (c)- (ii), (d)- (iv)  
 C. (a)-(iv), (b)- (iii), (c)- (ii), (d)- (i)                      D. (a)-(ii), (b)- (i), (c)- (iv), (d)- (iii)

34. Identify the organ system to which the organ X shown in the given picture belongs and select the correct statement regarding that organ system.



- A. It controls our actions, sense of feelings and thinking.
- B. It is responsible for removing waste materials from the body.
- C. It gives shape to our body.
- D. It is responsible for digestion of food and absorption of nutrients.

35. X is a material whose molecules are not very closely packed but has fixed volume.

Select the option that correctly identifies the examples of material X.

- E. Kerosene, Coconut oil
- B. Hydrogen, Steam
- C. Water, Oxygen
- D. Oxygen, Salt

36. Refer to the names of different types of fibres given in the box.

(i) Linen	(ii) Cotton	(iii) Nylon	(iv) Silk	(v) Jute	(vi) Wool
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How many of them are obtained from the stem of the plants?

- A. Three
- B. One
- C. Two
- D. Four

37. Refer to the given table and select the INCORRECT match of the material with its property and use?

	Material	Property	Use
A.	Cloth	Flexible	T-Shirt
B.	Glass	Transparent	Tumbler
C.	Wood	Strong	Table
D.	Metal	Flexible	Eraser

38. Which of the following food items is a rich source of carbohydrates?

F.



B.



C.



D.



39. Ruban took a piece of fabric and burnt it. On burning, it gave the smell of burning celery. This fabric could be made from

- A. Cotton
- B. Wool
- C. Nylon
- D. Linen

**40. Banana plant grows from \_\_\_\_\_.**

A. Underground stem

B. Root

C. Leaf

D. Flower

**ANSWER KEY**

1.(A)	2.(A)	3.(C)	4.(A)	5.(A)	6.(A)	7.(C)	8.(C)	9.(D)	10.(C)
11.(A)	12.(D)	13.(D)	14.(B)	15.(A)	16.(A)	17.(B)	18.(B)	19.(B)	20.(B)
21.(C)	22.(A)	23.(D)	24.(B)	25.(B)	26.(D)	27.(C)	28.(B)	29.(C)	30.(D)
31.(A)	32.(C)	33.(C)	34.(D)	35.(A)	36.(C)	37.(D)	38.(D)	39.(C)	40.(A)