

Class 5 · Science Olympiad

Total questions 50	Total marks 60	Time 60 minutes	Negative marking None
-----------------------	-------------------	--------------------	--------------------------

Each question has four options, of which only one is correct. Mark your answer on the answer sheet. The Achievers Section carries higher marks per question. The answer key with full solutions is at the end of this paper.

This is original practice material written to the Level 1 pattern. It is not a past paper and is not affiliated with SOF or any official olympiad body.

Logical Reasoning

10 questions · 1 mark each · 10 marks

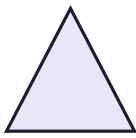
Q1. Find the next number in the pattern: 2, 5, 11, 23, ____

- (A) 45 (B) 46 (C) 48 (D) 47

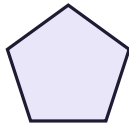
Q2. Count backward in 2s: 12, 10, 8, 6, ____

- (A) 5 (B) 6 (C) 4 (D) 2

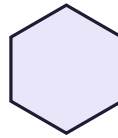
Q3. Which of these figures has exactly 6 lines of symmetry?



(A)



(B)



(C)



(D)

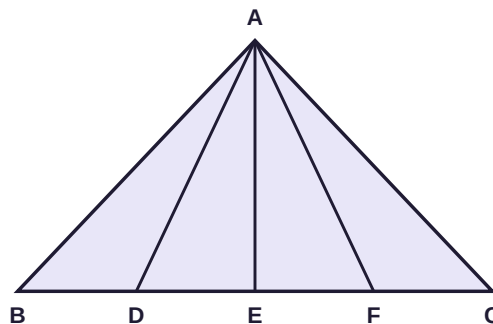
Q4. Pointing to a boy in a photograph, Vikram said, "He is the son of my paternal grandfather's only son." How is the boy related to Vikram?

- (A) Uncle (B) Cousin (C) Brother (D) Nephew

Q5. Kabir walks 7 m towards north, turns right and walks 8 m, then turns right again and walks 7 m. How far is Kabir from the starting point, and in which direction?

- (A) 15 m, North (B) 8 m, East (C) 7 m, East (D) 8 m, West

Q6. How many triangles are there in the given figure?



- (A) 9 (B) 10 (C) 11 (D) 12

Q7. In a class, 24 students play cricket, 17 play football and 9 play both games. Every student plays at least one of the two. How many students are there in the class?

- (A) 23 (B) 32 (C) 33 (D) 41

Q8. Pen : Write :: Knife : ____

- (A) Sing (B) Run (C) Cut (D) Sleep

Q9. In the first row the numbers are 3, 3 and 8. In the second row they are 3, 2 and 5. In the third row they are 9, 3 and ____ . The same rule applies to every row.

- (A) 28 (B) 25 (C) 27 (D) 26

Q10. A father is 22 years older than his son. The son is 11 years old now. How old will the father be after 8 years?

- (A) 41 years (B) 49 years (C) 42 years (D) 33 years

Science

35 questions · 1 mark each · 35 marks

Q11. Which of these is a herbivore — an animal that eats only plants?

- (A) Tiger (B) Cow (C) Eagle (D) Lion

Q12. Which process do green plants use to make their own food?

- (A) Respiration (B) Photosynthesis
(C) Digestion (D) Transpiration

Q13. Which of these is used to grow plants at home?

- (A) Glass in a pot (B) Soil in a pot
(C) Plastic in a pot (D) Paper in a pot

Q14. Which organ helps us to breathe?

- (A) The heart (B) The kidney (C) The lungs (D) The stomach

Q15. Which of these is a baby animal of a cat?

- (A) Cub (B) Puppy (C) Calf (D) Kitten

Q16. What do we call animals that are active at night?

- (A) Amphibians (B) Herbivores
(C) Aquatic animals (D) Nocturnal animals

Q17. What happens to ice kept in the hot sun?

- (A) It melts into water (B) It turns into sand
(C) It becomes a stone (D) It stays the same

Q18. What is the natural satellite of the Earth called?

- (A) Mars (B) A comet (C) The Moon (D) The Sun

Q19. Which of these is used to measure time?

- (A) A weighing scale (B) A clock
(C) A ruler (D) A thermometer

- Q20. Which planet is known as the Red Planet?
(A) Venus (B) Jupiter (C) Saturn (D) Mars
- Q21. How many teeth sets do humans get in a lifetime?
(A) One (B) Two (C) Three (D) Four
- Q22. Which animal is known as the ship of the desert?
(A) Elephant (B) Donkey (C) Camel (D) Horse
- Q23. Which insect makes honey?
(A) Bee (B) Ant (C) Fly (D) Spider
- Q24. Which of these is a non-biodegradable waste?
(A) Plastic bag (B) Vegetable peel
(C) Cotton cloth (D) Paper
- Q25. Which of these is a healthy food?
(A) Fruit (B) Fried chips (C) Cold drink (D) Candy
- Q26. Which planet is nearest to the Sun?
(A) Earth (B) Venus (C) Mars (D) Mercury
- Q27. Which of these floats on water?
(A) An iron nail (B) A coin
(C) A wooden stick (D) A stone
- Q28. Water freezes into ice at which temperature?
(A) -100°C (B) 10°C (C) 0°C (D) 100°C
- Q29. Where does a bird usually keep its eggs?
(A) In a hive (B) In a nest (C) In a web (D) In a burrow
- Q30. Where do fish take in oxygen from water?
(A) Through their gills (B) Through their fins
(C) Through their scales (D) Through their tail
- Q31. What should we do before eating food?
(A) Play in the mud (B) Nothing at all
(C) Touch a stray animal (D) Wash our hands
- Q32. Which gas in the air do we need to breathe?
(A) Carbon dioxide (B) Helium
(C) Oxygen (D) Nitrogen
- Q33. Which season is the hottest in India?
(A) Spring (B) Summer (C) Monsoon (D) Winter
- Q34. How many planets are there in our solar system?
(A) Ten (B) Eight (C) Nine (D) Seven

Q35. Which of these is used to measure length?

- (A) A thermometer (B) A ruler
(C) A weighing scale (D) A clock

Q36. Which of these is a good conductor of electricity?

- (A) Plastic (B) Wood (C) Rubber (D) Copper

Q37. What is ice made of?

- (A) Frozen milk (B) Frozen air (C) Frozen sand (D) Frozen water

Q38. How long does the Earth take to complete one rotation on its axis?

- (A) 30 days (B) 12 hours (C) 24 hours (D) 365 days

Q39. What do plants need to grow?

- (A) Only paper (B) Only plastic
(C) Water and sunlight (D) Only stones

Q40. Which simple machine is used in a see-saw?

- (A) Lever (B) Pulley (C) Wedge (D) Screw

Q41. Which of these is a baby animal of a dog?

- (A) Calf (B) Puppy (C) Kitten (D) Chick

Q42. Green colour in leaves is due to which pigment?

- (A) Carotene (B) Melanin (C) Chlorophyll (D) Haemoglobin

Q43. Which liquid helps digest food in the mouth?

- (A) Blood (B) Saliva (C) Sweat (D) Bile

Q44. What is the process of water changing into vapour called?

- (A) Melting (B) Freezing (C) Condensation (D) Evaporation

Q45. Which of these materials is attracted by a magnet?

- (A) Iron (B) Paper (C) Cloth (D) Glass

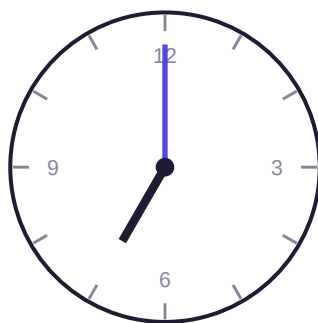
Achievers Section

5 questions · 3 marks each · 15 marks

Q46. 12 taps together fill a tank in 6 minutes. How long will 4 taps of the same kind take to fill it?

- (A) 6 minutes (B) 21 minutes (C) 18 minutes (D) 15 minutes

Q47. The clock in the figure shows 7:00. What is the angle between the hour hand and the minute hand?



- (A) 180° (B) 135° (C) 150° (D) 165°

Q48. Using each of the digits 6, 3, 0, 1 exactly once, what is the smallest 4-digit number that can be formed?

- (A) 1045 (B) 6310 (C) 0136 (D) 1036

Q49. You see a bird with a long, sharp, pointed beak catching fish. What does the beak shape tell you?

- (A) It is used for cracking seeds (B) It is suited to spearing and gripping fish
(C) It is used for digging soil (D) It is used for sipping nectar

Q50. How many numbers between 60 and 90 leave a remainder of 3 when divided by 7?

- (A) 6 (B) 3 (C) 4 (D) 5

Answer Key

1	2	3	4	5	6	7	8	9	10
D	C	C	C	B	B	B	C	D	A
11	12	13	14	15	16	17	18	19	20
B	B	B	C	D	D	A	C	B	D
21	22	23	24	25	26	27	28	29	30
B	C	A	A	A	D	C	C	B	A
31	32	33	34	35	36	37	38	39	40
D	C	B	B	B	D	D	C	C	A
41	42	43	44	45	46	47	48	49	50
B	C	B	D	A	C	C	D	B	C

Solutions

Q1. (D) Each number is doubled and 1 is added: $23 \times 2 + 1 = 47$.

Q2. (C) Subtracting 2 from 6 gives 4.

Q3. (C) Counting lines of symmetry: equilateral triangle has 3, regular pentagon has 5, regular hexagon has 6, rectangle has 2. The answer is figure (C).

Q4. (C) Vikram's paternal grandfather's only son is Vikram's own father, so that man's son is Vikram's own sibling. The answer is Brother.

- Q5. (B) The two 7 m walks (north, then south) cancel out, leaving only the 8 m walked towards the east. So the answer is 8 m, East.
- Q6. (B) Every triangle has apex A and two of the 5 base points as its other corners. Choosing 2 from 5 gives 10 triangles.
- Q7. (B) $24 + 17 - 9 = 32$. The 9 who play both were counted twice, so they are subtracted once.
- Q8. (C) The second word relates to the first in the same way Cut relates to Knife.
- Q9. (D) The rule is: multiply the two numbers, then subtract 1. Check: 3, 3 gives 8 and 3, 2 gives 5; so 9, 3 gives 26.
- Q10. (A) The father is $11 + 22 = 33$ now, so after 8 years he will be $33 + 8 = 41$ years.
- Q11. (B) A cow eats only plants, so it is a herbivore. Lions, tigers and eagles eat meat.
- Q12. (B) Photosynthesis makes glucose from carbon dioxide and water using sunlight.
- Q13. (B) Plants grow in soil, which holds water and nutrients. The answer is Soil in a pot.
- Q14. (C) The lungs take in oxygen from the air and give out carbon dioxide.
- Q15. (D) A baby cat is called a kitten.
- Q16. (D) Animals such as owls and bats that are active at night are called nocturnal. The answer is Nocturnal animals.
- Q17. (A) Heat makes ice melt back into water. The answer is It melts into water.
- Q18. (C) The Moon is the Earth's only natural satellite.
- Q19. (B) A clock measures time.
- Q20. (D) Mars looks red because of the iron oxide dust on its surface.
- Q21. (B) We get milk teeth first and then permanent teeth, so two sets.
- Q22. (C) The camel can travel long distances across the desert with very little water.
- Q23. (A) Honey bees make honey in their hive.
- Q24. (A) Plastic does not rot away naturally, so it is non-biodegradable. The answer is Plastic bag.
- Q25. (A) Fruit gives us vitamins and keeps us healthy.
- Q26. (D) Mercury is the closest planet to the Sun.
- Q27. (C) Wood is lighter than water for its size, so it floats. The answer is A wooden stick.
- Q28. (C) At normal pressure water freezes at 0°C and boils at 100°C .
- Q29. (B) Birds lay their eggs in a nest.
- Q30. (A) Fish breathe using gills, which take dissolved oxygen out of the water. The answer is Through their gills.
- Q31. (D) Washing hands before eating keeps germs away. The answer is Wash our hands.
- Q32. (C) We breathe in oxygen and breathe out carbon dioxide.
- Q33. (B) Summer is the hottest season.
- Q34. (B) There are eight planets, from Mercury to Neptune.
- Q35. (B) A ruler measures length.
- Q36. (D) Metals such as copper conduct electricity; rubber, wood and plastic are insulators.
- Q37. (D) Ice is water that has frozen solid. The answer is Frozen water.
- Q38. (C) One rotation takes about 24 hours and gives us day and night.
- Q39. (C) Plants need water, sunlight, air and soil to grow. The answer is Water and sunlight.
- Q40. (A) A see-saw is a lever balancing on a pivot called the fulcrum.
- Q41. (B) A baby dog is called a puppy.
- Q42. (C) Chlorophyll gives leaves their green colour and traps sunlight for photosynthesis.
- Q43. (B) Saliva moistens food and begins the digestion of starch in the mouth.
- Q44. (D) Evaporation is liquid water turning into vapour; condensation is the reverse.

Q45. (A) Magnets attract iron, nickel and cobalt. Glass, paper and cloth are not magnetic.

Q46. (C) One tap alone would take $12 \times 6 = 72$ minutes. With 4 taps the time is $72 / 4 = 18$ minutes.

Q47. (C) The minute hand is at 0° from 12 and the hour hand at 210° from 12, so the angle between them is 150° .

Q48. (D) A 4-digit number cannot begin with 0, so the smallest possible first digit is 1. The remaining digits are then placed in increasing order: 1036.

Q49. (B) Beak shape matches diet: a long pointed beak suits catching fish. The answer is It is suited to spearing and gripping fish.

Q50. (C) The numbers are 66, 73, 80, 87 — 4 of them.

Free practice paper from syllabax.com · more free sample papers for Classes 1–10 at syllabax.com/olympiad · not affiliated with SOF or any official olympiad body.