

SCO INTERNATIONAL OLYMPIAD

GRADE 4 SAMPLE PAPER

SCO INTERNATIONAL MENTAL ABILITY OLYMPIAD

Official SAMPLE PAPER | Class 4

Designed from Class 4 reasoning-skill pathways and aligned with SCO preparation, practice, reporting, and future-ready analytical growth.

- Chapter-wise official syllabus for Class 4 Mental Ability preparation
- Learning outcomes focused on logical, verbal, non-verbal, and applied reasoning
- Useful for schools, teachers, parents, and students preparing for SCO Olympiad

Series	Coding	Alphabet	Puzzles	Calendar
Ranking	Analogy	Cubes	Images	Data Suff.

SCO International Mental Ability Olympiad

Class 4 Sample Paper with Answer Key and Explanations

Class / Grade	Class 4
Exam	SCO International Mental Ability Olympiad
Question Paper Set	A
Session	Sample Practice Paper
Total Questions	35
Time	1 hour

Candidate Guidelines

Total Questions: 35 | Time: 1 hour

The paper has one correct answer for each multiple-choice question.

No negative marking is applied. Calculator use is not allowed unless specifically instructed.

All diagrams, passages, and tables belong to the question block in which they appear.

For OMR-style practice, shade only one option for each question.

Section A: General Mental Ability (Q1-Q20)

Q1. John ranked 8th from the top in a class of 50 students. What is his rank from the bottom?

- | | |
|---------|---------|
| A) 42nd | B) 43rd |
| C) 44th | D) 45th |

Answer: B) 43rd

Explanation: Rank from bottom = $50 - 8 + 1 = 43$.

Q2. A rectangle is 6 cm long and 4 cm wide. What is its perimeter?

- | | |
|----------|----------|
| A) 18 cm | B) 20 cm |
| C) 22 cm | D) 24 cm |

Answer: B) 20 cm

Explanation: Perimeter = $2 \times (\text{length} + \text{width}) = 2 \times (6 + 4) = 20$ cm.

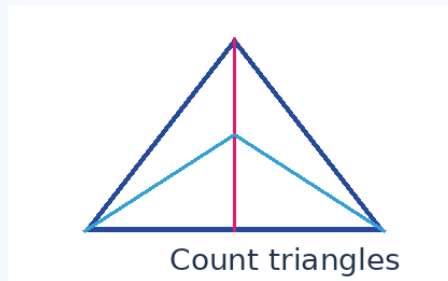
Q3. Akshay draws 2 circles on page 1, 4 on page 2, 6 on page 3, and 8 on page 4. How many circles will be drawn on page 5?

A) 10	B) 12
C) 14	D) 20

Answer: A) 10

Explanation: The pattern increases by 2 each time, so $8 + 2 = 10$.

Q4. Look at the triangle diagram. How many small triangles can be seen directly?

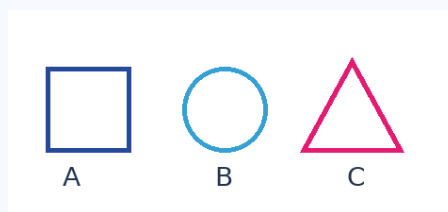


A) 4	B) 5
C) 6	D) 7

Answer: C) 6

Explanation: Counting the smallest parts and the larger combined triangles gives 6 direct triangles.

Q5. Which shape is the odd one out if three shapes have straight sides and one has no side?



A) Square	B) Triangle
C) Rectangle	D) Circle

Answer: D) Circle

Explanation: A circle has no straight sides, while the others are polygons.

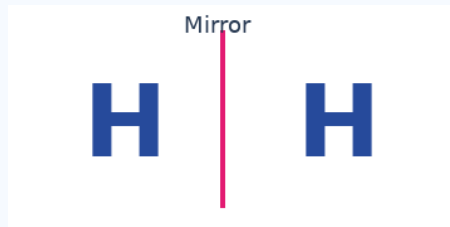
Q6. If one matchstick square needs 4 sticks and two connected squares need 7 sticks, how many sticks are needed for three connected squares in a row?

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

Answer: B) 10

Explanation: Each new square shares one side, so it adds 3 sticks. Three squares need $4 + 3 + 3 = 10$ sticks.

Q7. Which letter is vertically symmetrical?



A) F	B) L
C) H	D) R

Answer: C) H

Explanation: H can be divided into two mirror-equal halves by a vertical line.

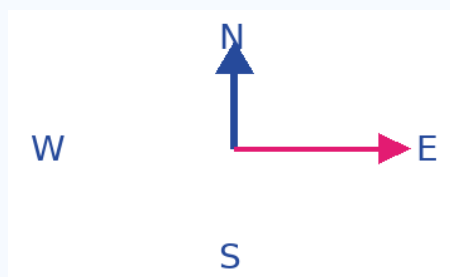
Q8. Which object is usually used to read time?

A) Bottle	B) Watch
C) Bag	D) Pen

Answer: B) Watch

Explanation: A watch is used to read time.

Q9. If a student is facing North and turns right, which direction is the student facing?



A) East	B) West
C) North	D) South

Answer: A) East

Explanation: A right turn from North gives East.

Q10. In a row of trees, one tree is fifth from both ends. How many trees are there in the row?

A) 5	B) 8
C) 9	D) 10

Answer: C) 9

Explanation: Total = $5 + 5 - 1 = 9$, because the same tree is counted from both sides.

Q11. Find the next term: 4, 7, 12, 19, 28, ?

A) 30	B) 36
C) 39	D) 49

Answer: C) 39

Explanation: Differences are 3, 5, 7, and 9. The next difference is 11, so $28 + 11 = 39$.

Q12. Which month has neither 31 days nor 30 days in a common year?

A) April	B) November
C) February	D) March

Answer: C) February

Explanation: In a common year, February has 28 days.

Q13. Arrange the words in dictionary order: Lamb, Leech, Live, Love. Which comes first?

A) Lamb	B) Leech
C) Live	D) Love

Answer: A) Lamb

Explanation: Lamb comes before Leech, Live, and Love in dictionary order.

Q14. If TABLE is called FURNITURE, FURNITURE is called DESK, DESK is called ALMIRAH, and ALMIRAH is called BENCH, where are clothes kept according to the code?

A) Furniture	B) Table
C) Desk	D) Bench

Answer: D) Bench

Explanation: Clothes are kept in an almirah, but in the code ALMIRAH is called BENCH.

Q15. If C means D, D means E, and E means F, which coded alphabet represents a vowel?

A) D	B) E
C) F	D) C

Answer: A) D

Explanation: The vowel E is called D in the code, so D represents a vowel.

Q16. How many letters are between the 8th letter from the left and the 7th letter from the right in the English alphabet?

A) 7	B) 8
C) 9	D) 11

Answer: D) 11

Explanation: 8th from left is H. 7th from right is T. Letters between H and T are I to S, which are 11 letters.

Q17. A student has 36 stickers. She gives 12 to a friend and then gets 9 more. How many stickers does she have now?

A) 31	B) 32
C) 33	D) 34

Answer: C) 33

Explanation: $36 - 12 + 9 = 33$.

Q18. Use the 1st, 5th, and 8th letters of SHORTAGE in alphabetical order of its letters. If a meaningful word can be formed, choose its first letter; if more than one word can be formed, choose X; if none, choose N.

A) E	B) S
C) X	D) N

Answer: C) X

Explanation: This type of question tests word formation. More than one meaningful arrangement can be possible, so X is the safe choice.

Q19. If you walk North, turn right, turn right again, and then turn left, which direction are you facing?

A) North	B) South
C) East	D) West

Answer: C) East

Explanation: North -> right is East. From East, another right turn gives South. A left turn from South gives East.

Q20. Which two-dimensional figure has 3 sides?

A) Pentagon	B) Rectangle
C) Triangle	D) Quadrilateral

Answer: C) Triangle

Explanation: A triangle has exactly three sides.

Section B: Reason and Assertion (Q21-Q25)

Q21. Assertion: A square has four equal sides. Reason: A square is a special rectangle with all sides equal.

A) Both true, Reason explains Assertion	B) Both true, Reason does not explain Assertion
C) Assertion true, Reason false	D) Both false

Answer: A) Both true, Reason explains Assertion

Explanation: A square has four right angles and four equal sides, so the reason explains the assertion.

Q22. Assertion: If a child is 8th from the top in a class of 50, the rank from the bottom is 43rd. Reason: Rank from bottom = total - rank from top + 1.

A) Both true, Reason explains Assertion	B) Both true, Reason does not explain Assertion
C) Assertion true, Reason false	D) Both false

Answer: A) Both true, Reason explains Assertion

Explanation: $50 - 8 + 1 = 43$.

Q23. Assertion: February always has 30 days. Reason: Every month has either 30 or 31 days.

A) Both true, Reason explains Assertion	B) Both true, Reason does not explain Assertion
C) Assertion true, Reason false	D) Both false

Answer: D) Both false

Explanation: February has 28 days in common years and 29 in leap years.

Q24. Assertion: A cube has 6 faces. Reason: A cube is a three-dimensional solid with square faces.

A) Both true, Reason explains Assertion	B) Both true, Reason does not explain Assertion
C) Assertion true, Reason false	D) Both false

Answer: A) Both true, Reason explains Assertion

Explanation: A cube has exactly 6 square faces.

Q25. Assertion: If the first day of a 31-day month is Monday, the last day is Wednesday. Reason: There are 30 days after the first day and $30 \bmod 7 = 2$.

A) Both true, Reason explains Assertion	B) Both true, Reason does not explain Assertion
C) Assertion true, Reason false	D) Both false

Answer: A) Both true, Reason explains Assertion

Explanation: Monday + 2 days = Wednesday.

Section C: Case Study and Applied Reasoning (Q26-Q30)

Q26. Case Study: A garden has flowers in rows. Row 1 has 3 flowers, row 2 has 6, row 3 has 9, and row 4 has 12. How many flowers are in row 6?

A) 15	B) 16
C) 18	D) 20

Answer: C) 18

Explanation: The rows increase by 3. Row 6 has $3 \times 6 = 18$ flowers.

Q27. Case Study: Mira faces East. She turns left, then right, then right again. Which direction is she facing?

A) North	B) South
C) East	D) West

Answer: B) South

Explanation: East -> left is North -> right is East -> right is South.

Q28. Case Study: The school chooses any 2 monitors from 4 students: A, B, C, and D. How many pairs are possible?

A) 4	B) 5
C) 6	D) 8

Answer: C) 6

Explanation: Pairs are AB, AC, AD, BC, BD, and CD: 6 pairs.

Q29. Case Study: A box contains 8 red balls and 7 blue balls. How many balls are there in total?

A) 13	B) 14
C) 15	D) 16

Answer: C) 15

Explanation: $8 + 7 = 15$.

Q30. Case Study: A student must choose the odd one out: mango, apple, carrot, banana. Which is different?

A) Mango	B) Apple
C) Carrot	D) Banana

Answer: C) Carrot

Explanation: Carrot is a vegetable, while the others are fruits.

Section D: Achievers Section (Q31-Q35)

Q31. An event code uses the mirror of the first letter of ALPHA, shifted 1 forward, and the day of the week for the 17th when the month starts on Wednesday. What is the code?

A) A-Fri	B) Z-Fri
C) A-Thu	D) Z-Thu

Answer: A) A-Fri

Explanation: A mirrors to Z and shifts forward to A. The 17th is 16 days after Wednesday; $16 \bmod 7 = 2$, so it is Friday.

Q32. A bus leaves 7 minutes late and travel time increases from 40 minutes by 30%. What is the arrival time if normal departure is 7:00 AM?

A) 7:52 AM	B) 7:59 AM
C) 8:05 AM	D) 8:12 AM

Answer: B) 7:59 AM

Explanation: New departure is 7:07 AM. New travel time is 52 minutes. Arrival = 7:59 AM.

Q33. A cube is cut into 27 equal cubes. How many small cubes have three painted faces if the large cube was painted on all faces?

A) 4	B) 6
C) 8	D) 12

Answer: C) 8

Explanation: Only the corner cubes have three painted faces. A cube has 8 corners.

Q34. A donation pattern is \$20, \$25, \$35, \$50. If the increase grows by 5 each time, what is the next donation?

A) \$60	B) \$65
C) \$70	D) \$75

Answer: C) \$70

Explanation: Increases are 5, 10, 15; next increase is 20. So $50 + 20 = 70$.

Q35. Which 3D shape has exactly 6 rectangular faces?

A) Cone	B) Cube
C) Cuboid	D) Pyramid

Answer: C) Cuboid

Explanation: A cuboid has 6 rectangular faces. A cube has square faces, which are special rectangles, but the expected Grade 4 term for rectangular faces is cuboid.

Answer Key Summary

Q.No.	Answer	Q.No.	Answer	Q.No.	Answer	Q.No.	Answer	Q.No.	Answer
1	B	8	B	15	A	22	A	29	C
2	B	9	A	16	D	23	D	30	C
3	A	10	C	17	C	24	A	31	A
4	C	11	C	18	C	25	A	32	B
5	D	12	C	19	C	26	C	33	C
6	B	13	A	20	C	27	B	34	C
7	C	14	D	21	A	28	C	35	C