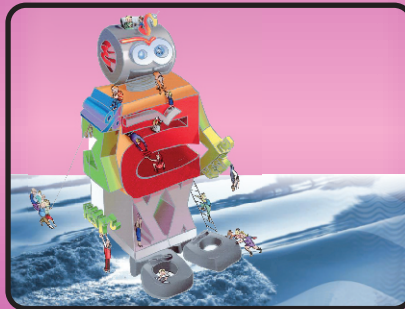


EtG

OLYMPIAD EXPLORER



Workbook for
Nationwide Interactive **MATHS** Olympiad & Other
National/International Olympiads/Talent Search Exams.

Based on CBSE, ICSE, GCSE, State Board Syllabus & NCF (NCERT)

100's of Q's with answers

- Chapterwise Practice Q's
- Revision Q's
- Sample Paper



Class

1

EDUHEAL FOUNDATION

• LEARNING FOR LIFE •

EduHeal Foundation conducts 5 Olympiads annually reaching out to 3,500 + Schools
• 4 Lakh + Students • 50,000 Coordinating Teachers and having 500 Resource persons
in English / Maths / Science / Biotech / Computer & 300 Regional Coordinators.

PRIZES



WORKSHOP • TEACHER TRAINING PROG. • MAGAZINE/LAB GRANT • PRINCIPAL LEADERSHIP AWARD.

Contents

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Please note there are no revision questions for class - 1 students.



SYLLABUS GUIDELINES

CLASS - I

Based on CBSE, ICSE & GCSE Syllabus
& NCF guidelines devised by NCERT.

1. Geometry

SHAPES & SPATIAL UNDERSTANDING

- Develops and uses vocabulary of spatial relationship (Top, Bottom, On, Under, Inside, Outside, Above, Below, Near, Far, Before, After)

SOLIDS AROUND US

- Collects objects from the surroundings having different sizes and shapes like pebbles, boxes, balls, cones, pipes, etc.
- Sorts, Classifies and describes the objects on the basis of shapes and other observable properties.
- Observes and describes the way shapes affect movements like rolling and sliding.
- Sorts 2-D shapes such as flat objects made of card etc.

2. Numbers

DEVELOPING A SENSE OF NUMBERNESS, COUNTING AND OPERATIONS OF NUMBERS 1-9 AND ZERO

- Observes object and makes collections of objects.
- Arranges the collection of objects in order by
 - Matching and
 - One to one correspondence
- Counts the number of objects in a collection.
- Makes collection of objects corresponding to a specific number.
- Recognises and speaks numbers from 1 to 9.
- Uses numbers from 1 to 9 in counting and comparison. (Real objects and repeated events like clapping to be used for counting)
- Reads and writes numerals from 1 to 9.
- Adds and subtracts using real objects and pictures.
- Adds and subtracts the numbers using symbols '+' and '-'.
- Approaches zero through the subtraction pattern (such as $3 - 1 = 2$, $3 - 2 = 1$, $3 - 3 = 0$).

NUMBERS FROM (10-20)

- Forms Number sequence from 10 to 20.
- Counts objects using these numbers.
- Groups objects into a group of 10s and single objects.
- Develops the vocabulary of group of 'tens' and 'ones'.
- Shows the group of tens and ones by drawing.
- Counts the number of tens and ones in a given number.
- Writes the numerals for eleven to nineteen.

- Writes numerals for ten and twenty.
- Compares numbers upto 20.

ADDITION AND SUBTRACTION (UPTO 20)

- Adds and subtracts numbers upto 20.

NUMBERS FROM 21-99

- Writes numerals for Twentyone to Ninety nine. Groups objects into tens and ones.
- Draws representation for groups of ten and ones.
- Groups a number orally into tens and ones.

MENTAL ARITHMETIC

- Adds two single digit numbers mentally.

3. Money

- Identifies common currency notes and coins.
- Puts together small amounts of money.

4. Measurement

LENGTH

- Distinguishes between near, far, thin, thick, longer/taller, shorter, high, low.
- Seriates objects by comparing their length.
- Measures short lengths in terms of nonuniform units (in the context of games e.g. 'Gilli Danda' and 'marble games').
- Estimates distance and length and verifies using non-uniform units (e.g. hand span etc.)

WEIGHT

- Compares between heavy and light objects.

5. Time

- Distinguishes between events occurring in time using terms earlier and later.
- Gets the qualitative feel of long & short duration, of school days v/s holidays.
- Narrates the sequence of events in a day.

6. Data Handling

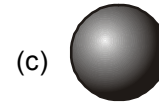
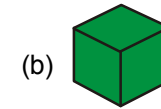
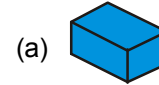
- Collects, represents and interprets simple data such as measuring the arm length or circumference of the head using a paper strip.

7. Patterns

- Describes sequences of simple patterns found in shapes in the surroundings and in numbers, e.g. stamping activity using fingers and thumb.
- Completes a given sequence of simple patterns found in shapes in the surroundings and in numbers.

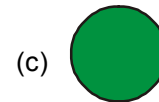
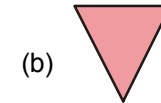


Q.1. Which of these is a sphere?



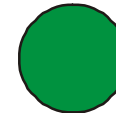
(d) none of these

Q.2. Which of these is a square?



(d) none of these

Q.3. What shape is this?



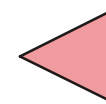
(a) rectangle (b) circle (c) square (d) triangle

Q.4. What figure is this?



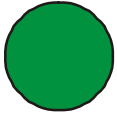
(a) sphere (b) cone
(c) cylinder (d) rectangular prism

Q.5. What shape is this?



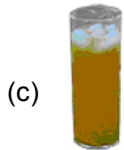
(a) square (b) circle (c) rectangle (d) triangle

Q.6. What shape is this?



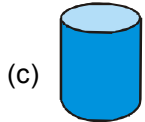
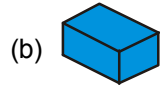
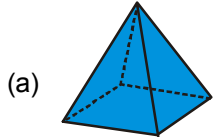
- (a) triangle
- (b) rectangle
- (c) square
- (d) circle

Q.7. Which Items are Shaped like a Cylinder?



(d) Both (a) & (c)

Q.8. Which of these is a pyramid?



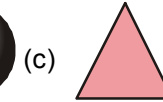
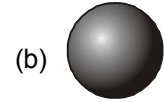
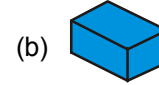
(d) none of these

Q.9. What is outside ?



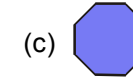
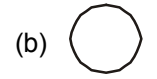
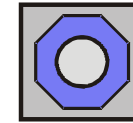
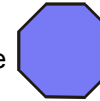
- (a)
- (b)
- (c) both &
- (d) none of these

Q.10. Which solid figure can you trace to make this plane figure?



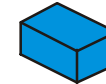
(d) none of these

Q.11. What is inside the



(d) none of these

Q.12. How many edges does this figure have?



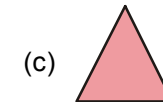
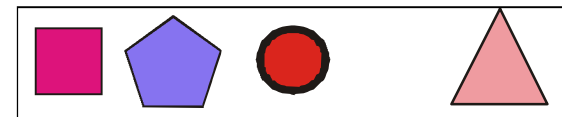
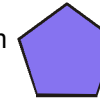
(a) 6

(b) 12

(c) 10

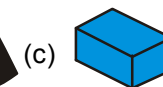
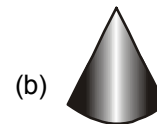
(d) 16

Q.13. Which is far from



(d) none of these

Q.14. Which solid figure can you trace to make this plane figure?



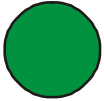
(d) none of these

Q.15. How many vertices does this shape have?



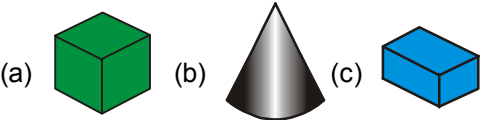
- (a) 3 (b) 4 (c) 5 (d) none of these

Q.16. Which of the following solid can you trace to make this plane figure?



- (a) A coin (b) Ice cream cone
(c) Match box (d) none of these

Q.17. Which item's shape is cube?



- (a) (b) (c) (d) none of these

Q.18. Which items are shaped like cylinder?

- (a) A match box (b) Pepsi cane
(c) Chapatti (d) none of these

Q.19. How many sides does this shape have?



- (a) 2 (b) 3 (c) 4 (d) none of these

Q.20. How many faces does this figure have?



- (a) 3 (b) 5 (c) 6 (d) none of these

Q.21. Which shape has fewer vertices?



Fig. 1

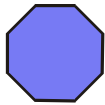
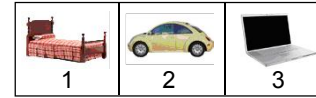


Fig. 2

- (a) Fig. 1 (b) Fig. 2
(c) Both are equal (d) none of these

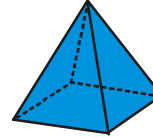
Q.22.



Which figure have circle.

- (a) 1 (b) 2 (c) 3 (d) none of these

Q.23. How many edges does this figure have?



- (a) 3 (b) 4 (c) 8 (d) none of these

Q.24. Which figure has more edges?

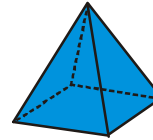


Fig. 1



Fig. 2

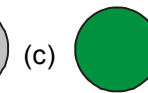
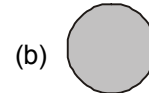
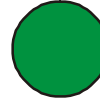
- (a) Fig. 1 (b) Fig. 2
(c) both have equal edges (d) none of these

Q.25. Is this shape open or closed?



- (a) open (b) closed (c) can't say (d) none of these

Q.26. Select the objects which is similar to:



- (a) (b) (c) (d) none of these


Q.27. Which object is on the right hand side?



- (a) (b) (c) (d) none of these

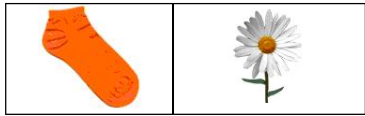
Q.28. Look :



Where is the camera  ?

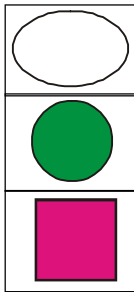
- (a) top
- (b) middle
- (c) bottom
- (d) none of these

Q.29. Where is the flower?



- (a) right
- (b) left
- (c) middle
- (d) none of these

Q.30. Look:



Which shape is above the circle?

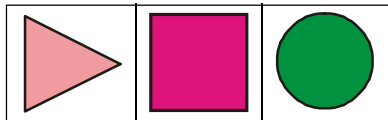
- (a) square
- (b) oval
- (c) sphere
- (d) none of these

Q.31. Where is the biscuit?

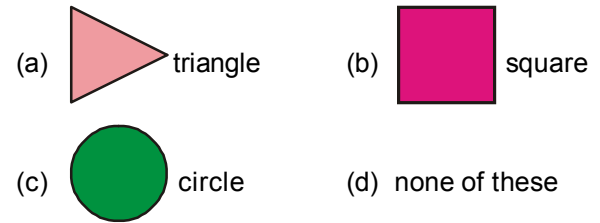


- (a) left
- (b) right
- (c) middle
- (d) none of these

Q.32. Look:







Which shape is at the middle?

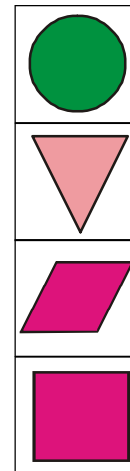



Q.33. Which is in the top center?



- (a)  spool of thread
- (b)  antelope
- (c)  tree
- (d)  butterfly

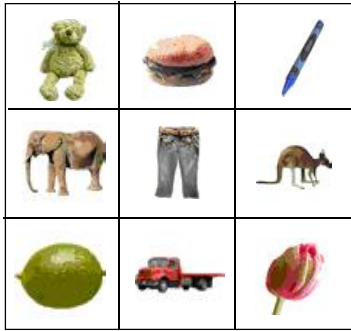
Q.34. Look:






Where is the circle? 

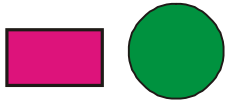
- (a) top
- (b) middle
- (c) bottom
- (d) none of these

Q.35. Which is the bottom left?



- (a)  teddy bear (b)  pair of pants
 (c)  elephant (d) none of these

Q.36. Look:

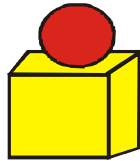


The circle is to the _____ of the rectangle.




- (a) left (b) right (c) none of these

Q.37. Ball is _____ the box.

- (a) in
 (b) on
 (c) under
 (d) none of these



Q.38. Which shape has no sides?

- (a)  (b)  (c)  (d) none of these



ANSWERS

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



Q.1. Count the umbrellas.

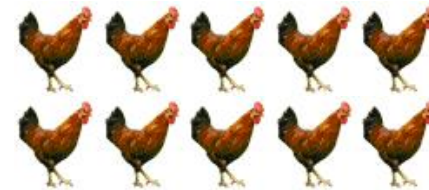


Now choose the picture that shows how you **count down 3**.



(d) none of these

Q.2. Count the cocks.



Now choose the picture that shows how you **count down 1**.



(d) none of these

Q.3. Count the burgers.

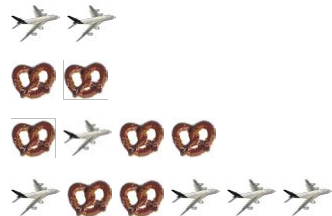


Now choose the picture that shows how you **count down 3**.



(d) none of these

Q.4. How many toy planes are there?



(a) 2 (b) 6 (c) 7 (d) none of these

Q.5. How many TV sets are there?



(a) 14 (b) 12 (c) 15 (d) none of these

Q.6. How many sticks are there?



(a) 20 (b) 18 (c) 24 (d) none of these

Q.7. How many balloons are there? Count by fives.



(a) 6 (b) 30 (c) 20 (d) none of these

Q.8. How many boots are there? Count by twos.



(a) 4 (b) 6 (c) 8 (d) none of these

Q.9. When counting by **twos**, what comes **before** 20?

(a) 16 (b) 18 (c) 22 (d) none of these

Q.10. What number comes before 21?

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

(a) 22 (b) 20 (c) 25 (d) none of these

Q.11. What is the missing number?

5 6 7 9

(a) 10 (b) 8 (c) 3 (d) none of these

Q.12. Does 89 comes before 90?

(a) yes (b) no (c) can't say (d) none of these

Q.13. Which number comes just after 34?

(a) 33 (b) 35 (c) 36 (d) none of these



ANSWERS

1. (b) 2. (a) 3. (c) 4. (c) 5. (c) 6. (c) 7. (b) 8. (c)
 9. (b) 10. (b) 11. (b) 12. (a) 13. (b)



NATIONWIDE INTERACTIVE MATHS OLYMPIAD (NIMO) SAMPLE PAPER

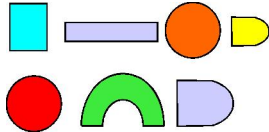
Total duration : 40 Minutes

Total Marks : 25

SECTION - A

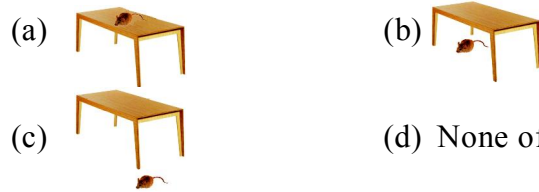
MENTAL ABILITY

1. How many **CIRCLES** are there in the given set?



- (a) 2 (b) 3 (c) 4 (d) 5

2. In which pictures the mouse is **UNDER** the table?



- (a) (b) (c) (d) None of these

3. What will be the next figure in the pattern ?



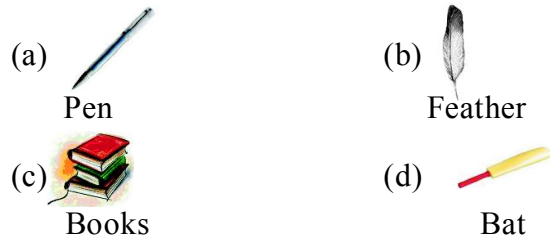
- (a) (b) (c) (d) None of these

4. Which of these object is **SHORTEST**?



- (a) (b) (c) (d)

5. Which of these objects is the **LIGHTEST**?



- (a) Pen (b) Feather
(c) Books (d) Bat

SECTION - A

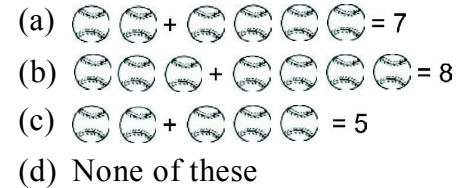
MATHEMATICS

6. Which of the following shape is a **TRIANGLE**?



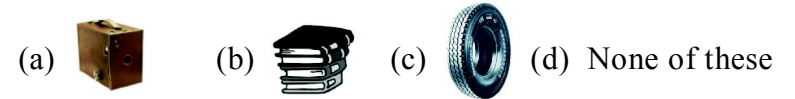
- (a) (b) (c) (d)

7. Which statement is **CORRECT** ?



- (a) (b) (c) (d) None of these

8. Which of the following can **ROLL**?



- (a) (b) (c) (d) None of these

9. Which is **CORRECTLY ARRANGED** according to time?

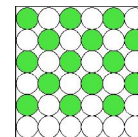
- (a) Evening, Morning, Night, Afternoon
(b) Morning, After noon, Evening, Night
(c) Night, Morning, Evening, Afternoon
(d) None of these

10. How many shapes are there in the given figure.



- (a) 40 (b) 32 (c) 22 (d) None of these




11. What will be the pattern of circle in the **BOTTOM LINE**?






- (a)  (b) 
 (c)  (d) None of these


12. $\square + \square = 9$. The numbers in boxes are
 (a) 3 and 6 (b) 4 and 5
 (c) 2 and 7 (d) Any of these

13. Which currency note is **LARGEST** ?

- (a)  (b) 
 (c)  (d) None of these


14. Which is **NOT** correctly matched

- (a) Ten - 
 (b) Five - 
 (c) Sixteen - 
 (d) None of these

15. 
 Ravi grouped the given balls in **TENS**. How many groups he will make?
 (a) 2 (b) 3 (c) 4 (d) None of these

16. Which is true ?

- (a)  (b) 
 (c)  (d) 

17. 
 Which fruit is in the top layer of the pyramid?

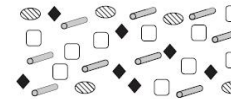
- (a) Apple (b) Banana
 (c) Grapes (d) None of these

18. The length of pencil is




- (a) 7 clips (b) 8 clips
 (c) 5 clips (d) None of these

- 19.



Which is present in the largest number?

- (a)  (b)  (c)  (d) 

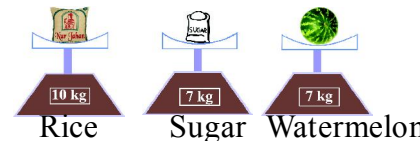
- 20.



How many straight lines are there in the figure

- (a) 4 (b) 6
 (c) 8 (d) None of these





- 21.




Which two things are equal in weight

- (a) Rice and sugar (b) Sugar and watermelon
 (c) Rice and water melon (d) None of these

- 22.

Class Section	Number of Students
Class 1 A	
Class 1 B	
Class 1 C	
Class 1 D	

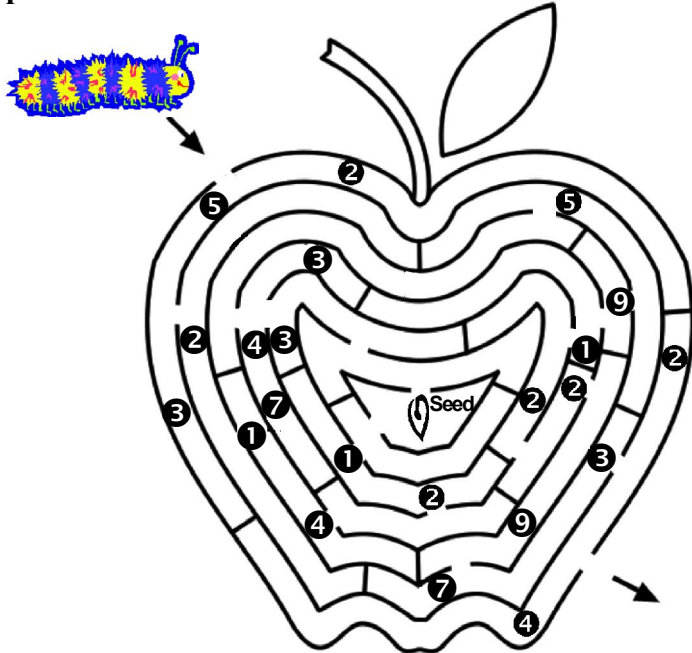
 = 1 student

Which section has largest number of students ?

- (a) Class 1B (b) Class 1A
 (c) Class 1D (d) None of these

SECTION C : INTERACTIVE SECTION

An insect entered in the apple from the point shown. Which path should it follow to come out of this apple.



23. What is the total of the numbers which comes in the path till it reaches seed?
- (a) 13 (b) 10 (c) 15 (d) None of these
24. Which number you did not add?
- (a) 5 (b) 2 (c) 7 (d) None of these
25. How many numbers you added to get the total?
- (a) 4 (b) 6 (c) 8 (d) None of these

☺ **END OF THE EXAM** ☺

ANSWERS

- | | | | | |
|---------|---------|---------|---------|---------|
| 1. (a) | 2. (b) | 3. (b) | 4. (c) | 5. (b) |
| 6. (c) | 7. (c) | 8. (c) | 9. (b) | 10. (b) |
| 11. (c) | 12. (d) | 13. (c) | 14. (c) | 15. (b) |
| 16. (c) | 17. (c) | 18. (a) | 19. (b) | 20. (c) |
| 21. (b) | 22. (c) | 23. (c) | 24. (c) | 25. (b) |

☺☺☺