Dear Students,

As the warmth of summer envelops us, let's take a moment to reflect on the wisdom of Helen Keller: "Life is either a daring adventure or nothing at all." Indeed, without challenges and uncertainties, life would lose its essence, much like a ship adrift in calm waters. May and June offer us a chance for self-reflection and rejuvenation. It's a time to strengthen family bonds, explore new horizons, and pursue our passions.

An umbrella, a book, and the mind serve their purpose only when open. Let's embrace the endless possibilities before us. Let our minds unfold like blooming flowers, eager to absorb wisdom and experiences. The Summer Holiday Engagement of 2024 calls us to focus on Social Emotional and Experiential Learning.

Each challenge we face will be a stepping stone to personal growth. Let's not forget the joy of learning, the thrill of exploration, and the warmth of companionship.

I hold each of you in high regard for your creativity and strengths. Let's make this Dronachariyan initiative of the Summer Holiday Homework 2024-25 a journey filled with learning and laughter. Let's redefine ourselves and embrace collaboration, innovation, and compassion.

Class Teacher*

8th Summer Holiday Homework

Week - 1 (1st Jun to 9th Jun)

PROJECT OF THE WEEK:
ACTIVITY:

- Investigate which elections have been conducted recently, both locally and globally. Document the dates, locations, and key details of these elections.
- Write an essay explaining the need for elections in a democratic society. Discuss how elections contribute to governance, representation, and the functioning of a democratic system.
- Read the newspaper every day to stay updated on election news. Based on your readings, predict the results of upcoming elections and provide reasoning for your predictions.
- Choose a political party you support and write a short essay explaining your reasons for supporting this party. Discuss their key policies, values, and impact on society.

- If you were to form your own political party, what would it be called? Outline the key agendas and policies of your party. Explain how your party would address current issues and improve society.

OBJECTIVES:
- To enhance research skills and knowledge of current events.
- To understand the significance of elections in a democracy.
- To develop analytical and predictive abilities based on news readings.
- To encourage critical thinking and personal expression regarding political preferences.
- To foster creativity and strategic thinking in the creation of a political party.

Day/Date	Hindi	English	Check List
Saturday 1st June	व्याकरण वर्कशीट में अपठित गद्यांश 1 करें ।	Do exercise of Chapter - 30 in grammar book(unseen passage)	
Sunday 2nd June	अपठित गद्यांश 2 करें ।		
Monday 3rd June	पाठ 3 पढ़ें ।	Do exercise of Chapter -32 in grammar book (Unseen passage)	
Tuesday 4th June	पाठ के आधार पर आंकलन कीजिए कि आज की चिकित्सा पद्धति और प्राचीन शिक्षा पद्धति में क्या अंतर है ?	Do exercise of Chapter -33 in grammar book (Unseen passage)	
Wednesday 5th June	आज पर्यावरण दिवस है । अपने पर्यावरण को स्वच्छ बनाने में आप ही भागीदार बनिए एक पौधा लगाए और उसके देखभाल करें और कुछ बीज भी रोपें। (आम ,जामुन की गुठली)	Write a paragraph on benefits of yoga.	
Thursday 6th June	यदि विज्ञान के क्षेत्र में तरक्की नहीं होती और अविष्कार नहीं होते तो जीवन में क्या बदलाव होता है ? इस विषय पर अभिभावकों से चर्चा कीजिए ।	Read Chapter -1 (An Unsung Hero) and identify 10 Masculine gender from the chapter and write their opposite also i.e Feminine gender	
Friday 7th June	पाठ 3 में पतंजलि द्वारा योग के महत्व को दर्शाया गया है । छुट्टियों में आप भी कुछ योगासन कीजिए और उनके द्वारा होने वाले लाभ लिखिए	Do exercise of Chapter -31 in grammar book (Unseen passage)	
Saturday 8th June	अपठित गद्यांश 3 करें ।		
Sunday 9th June	PROJECT OF THE WEEK	PROJECT OF THE WEEK	

Day/Date	Science	Social Science	Check List
Saturday 1st June	Read ½ Ch 4 carefully and underline the difficult words.	Activity -1 Make a list of all the things you use at your home and School.In your P.N.B, make three Columns headed- Natural Resources, Human Resources and Human made Resources. Under each heading write the name of the Object you think is most suitable.	
Sunday 2nd June	—	—	
Monday 3rd June	Draw any activity of Ch. 4 in F.N.B. and fill exercise..	Read Ch-1 Resources (Geography)	
Tuesday 4th June	Write notes of Ch. 4 in fair notebook.	Write important points of Ch-1	
Wednesday 5th June	Ch. 4 complete read and Draw a mind map of Ch 4.	Learn and Write exercise of Ch-1	
Thursday 6th June	Make 20 one word Q. From the ch. 4 and take a photo of Q. and send it to subjective teacher.	Map work - Mark the major types of Soil on the Map of India.	
Friday 7th June	Learn MCQs and very short questions of Ch 4.	Learn and Write Questions/Answer of Ch-1	
Saturday 8th June	Prepare a seminar and explaining to your family and make a vedio and send it to your teacher.	Write a short note on the Conservation of Resources.	
Sunday 9th June	PROJECT OF THE WEEK	PROJECT OF THE WEEK	

Day/Date	Maths	Reasoning	Check List
Saturday 1st June	Write down prime numbers between 1 to 100 on A4 size sheet and depict how many numbers are prime numbers. There is any number which is prime and even.	Write mirror images of names of your family members	
Sunday 2nd June	You are given two numbers in the form of p/q. How would you differentiate between them that which one is rational number and which one is fraction. Are integers also rational numbers given reason.Give 5 examples of each (fraction and rational numbers). Are all rational	QUESTION-1	

	numbers fractions and vice varsa.		
Monday 3rd June	Labeling the Age Group as 0-5 Kids, 5 to 20 Young ,20 to 40 Adults and 40 and Above as Senior Citizens. Conduct a survey at least five houses and observe what fraction of total population was in these five houses are kids, young , adults and senior citizens. Which among the following fraction is smallest. Also reduce the fractions to Lowest form (if any).	QUESTION-2	
Tuesday 4th June	Write the properties of rational number on A4 size sheet.	QUESTION-3	
Wednesday 5th June	On the basis of Lok Sabha election results find out the number of seats won by each party in Haryana. Also find out the total number of Lok Sabha seats in Haryana ,then predict what fraction of seats won by each party and which party has won highest % of seats.	QUESTION-4	
Thursday 6th June	Measure the Height of Each of Your Family Members .Have you observed the different measuring units on measuring tape? Write down the heights of your family members in inches, feet and centimeters.	QUESTION-5	
Friday 7th June	Represent the numbers and their additive inverse on the number line (3/4, -5/2 , 0, -1/3).Also write the multiplicative inverse of these numbers.	QUESTION-6	
Saturday 8th June	Observe the amount of mentioned on hair oil bottle at your home . if you use 15/2 ml of oil daily then how long the oil will last .what if all your family members use the same amount of oil from the same bottle then how long will it last?	QUESTION-7	
Sunday 9th June	PROJECT OF THE WEEK	PROJECT OF THE WEEK	

Day/Date	Computer	Sanskrit	Check List
Saturday 1st June	Read ch 1 and make 10 very short questions.		
Sunday 2nd June		प्र-1 कोऽपि सर्वनाम शब्दः रुप लिखत।	
Monday 3rd June			
Tuesday 4th June			
Wednesday 5th June		सायंकालस्य सौंदर्यस्य वर्णन चित्र बनाकर दर्शाए।	
Thursday 6th June			
Friday 7th June			
Saturday 8th June	Learn and Write A to Z shortcut keys		
Sunday 9th June	PROJECT OF THE WEEK	PROJECT OF THE WEEK	

Day/Date	Fine Arts	Check List
Saturday 1st June	Draw a beautiful landscape colour it use A3 paper	
Sunday 2nd June		
Monday 3rd June		
Tuesday 4th June		
Wednesday 5th June	Make a collage painting use news paper colour paper	
Thursday 6th June		
Friday 7th June		
Saturday 8th June		
Sunday 9th June	PROJECT OF THE WEEK	

Week - 2 (10th Jun to 16th Jun)

PROJECT OF THE WEEK:
ACTIVITY:
- Make a diet chart for your whole family including different fruits and vegetables available at home according to the calories needed by the individuals.
- Write and dedicate a poem to your father and send a video of the poem recitation to your class teacher.
- Make a list of local fruits and vegetables found in your area and describe how to grow them without fertiliser.
- Prepare an expense chart including the family income and the monthly expenditure and devise some methods on how to save money.

OBJECTIVES:
- To learn about healthy eating and planning balanced meals.
- To express creativity and emotions through poetry.
- To understand sustainable gardening practices and local agriculture.

Day/Dat	Hindi	English	Check List
Monday 10th June	अपठित गद्यांश 4करें ।	Know more – interview your parents (5-10) question enquiring their hobbies, childhood etc.	
Tuesday 11th June	अपठित गद्यांश 5 करें।	Read Chapter -Nouns carefully	
Wednesday 12th June	पर्यावरण दिवस के दिन आपने जो पौधा लगाया या जो बीच रोपे, उनकी स्थिति का वर्णन कीजिए और उसकी एक फोटो लीजिए ।	Write and learn 25 collective nouns	
Thursday 13th June	पाठ 1 वरदान कविता पढ़ें।	Draw a neat and clean flowchart of Nouns with examples and send it to me	
Friday 14th June	कविता के आधार पर स्वयं एक प्रार्थना गीत लिखे तथा उसे अपने दादा - दादी, माता-पिता , नाना - नानी को सुनाए	Make your own crossword puzzle on topic (like - Nouns, Pronouns, Adjectives etc.)	
Saturday 15th June	पितृ दिवस (Father's day) पर अपने पिता के लिए एक कविता लिखें। और अगले दिन (Father's day) अपने पिताजी सुनाएं । आप अपने पिताजी की तस्वीर लगाकर एक प्यारा सा कार्ड भी तैयार कर सकते हैं ।	To develop your speaking skill write a story based on your imagination	
Sunday 16th June	PROJECT OF THE WEEK	PROJECT OF THE WEEK	

Day/Dat	Science	Social Studies	Check List
Monday 10th June	Find short Q/Ans.of Ch 4.and mark in your book.	Read Ch-1 Needs for Laws (Civics)	
Tuesday 11th June	Test of materials that are good conductor of electricity or poor conductor of electricity. And make a list that are good conductors.	Write important points of Ch-1 (Civics)	
Wednesday 12th June	Take a test of your own 20 marks and check it yourself. Take a photo and send it to your subjective teacher.	Learn and Write exercise of Ch-1 (Civics)	
Thursday 13th June	List the 20 objects which are made up of metals and which metal is used in the manufacturer.	Chart Making - Make a Chart on the important features of the Indian Constitution that have been borrowed from other countries.	
Friday 14th June	Testing the electrical conductivity of a potato.	Learn and Write Questions/Answer of Ch-1	
Saturday 15th June	Make a list of exceptional cases from Ch 4.Metals and non-metals.	Write a Short note on the biography of the father of the Constitution of India.	
Sunday 16th June	PROJECT OF THE WEEK	PROJECT OF THE WEEK	

Day/Date	Maths	Reasoning	Check List
Monday 10th June	Fold a rectangular paper three times and then unfold it. point out all the vertex of the square/ rectangles and also count how many squares or rectangles you get?	Draw water images of 5 2D shapes.	
Tuesday 11th June	Daksh was Writing a Series of Multiplication of Identical Numbers as I) 3×3×3×3×3×3×3. II) 2×2×2×2×2×2×2×2×2×2. III) 5×5×5×5 . is there another way to write this long multiply shortly. If it is so then write it into short form. Can 8×8×8 be written with two different bases.	Draw water images of 5 fruits name.	
Wednesday 12th June	Find the distance between sun and earth, sun and moon, Earth and moon ,and write these distance in scientific form. Also find what is the unit of measuring such long distances.	QUESTION-8	

Thursday 13th June	Make a chart on laws of exponents .(Best chart will be rewarded).	QUESTION-9	
Friday 14th June	Make mind map of chapter 1	QUESTION-10	
Saturday 15th June	You decided a surprise party on father's day. Prepare a budget for the program including the important items along with there rate list. What was the total expenditure of the program.	QUESTION-11	
Sunday 16th June	PROJECT OF THE WEEK	PROJECT OF THE WEEK	

Day/Date	Computer	Sanskrit	Check List
Monday 10th June			
Tuesday 11th June		प्र-2 विशेषण- विशेष्य प्रकरणं पढ़िए और अभ्यास कार्य पूरा कीजिए।	
Wednesday 12th June			
Thursday 13th June			
Friday 14th June	Read ch 2 and make 10 very short questions.		
Saturday 15th June	Write and any 15 full forms.		
Sunday 16th June	PROJECT OF THE WEEK	PROJECT OF THE WEEK	

Day/Date	Fine Arts	Check List
Monday 10th June	Make a beautiful object best out of the waste	
Tuesday 11th June		
Wednesday 12th June	Make any portrait A3 size	
Thursday 13th June	Draw a beautiful landscape & colour it	
Friday 14th June		
Saturday 15th June		
Sunday 16th June	PROJECT OF THE WEEK	

Week - 3 (17th Jun to 23rd Jun)

PROJECT OF THE WEEK: <u>YOGA AND ITS IMPORTANCE</u>
ACTIVITY:
- Perform complete Surya Namaskar, record its video and send it to your class teacher.
- Click your photos in different yoga poses and share the photos with your class teacher.
- Research the scientific evidence behind Yoga's benefits for stress management. Create a presentation or infographic highlighting your findings.
  Explore: Stress hormones, relaxation techniques, breathing exercises.
  Materials: Notebook, pen, internet access.
- Ask your family members and write their insights regarding yoga in the form of a paragraph.

OBJECTIVES:
- To encourage students into learning the ancient yoga art.
- To promote well being and develop self discipline.

Day/Date	Hindi	English	Check List
Monday 17th June	अपठित गद्यांश 6 करें।	Read Chapter - Pronouns carefully	
Tuesday 18th June	पाठ - 2 घोंसला कहानी पढ़ें।	Prepare seminar on pronouns and make a video of your seminar and send it to me	
Wednesday 19th June	अपने आस - पास पाए जाने वाले पक्षियों की सूची बनाइए ।		
Thursday 20th June	पता लगाइए की कौन-कौन से पक्षी विलुप्त होते जा रहे हैं और इसका क्या कारण है ?		
Friday 21st June	योग दिवस पर डांसिंग योग कीजिए और उसकी वीडियो भेजिए।	Make crossword puzzle by using the vocabulary given in your chapter 1 and chapter 2 in reader book.	
Saturday 22nd June	अपठित गद्यांश 7 कीजिए।		
Sunday 23rd June	PROJECT OF THE WEEK	PROJECT OF THE WEEK	

Day/Date	Science	Social Studies	Check List
Monday 17th June	Read Ch 5 carefully (coal and petroleum) and underline the difficulty words.	Read Ch-1 When, Where and How (History)	
Tuesday 18th June	Write a note on coal and petroleum. How they are formed.	Write important points of Ch-1 (History)	
Wednesday 19th June	Write and learn physical characteristics and uses of coal.	Learn and Write exercise of Ch-1 (History)	

Thursday 20th June	Describe the formation of natural gas.	Survey - Conduct a census of five families of your neighbourhood listing details about the numbers of members, their sex, educational qualification, religion and caste.	
Friday 21st June	Make a list where you use coal, petroleum and natural gas.	Learn and Write Questions/Answer of Ch-1 (History)	
Saturday 22nd June	Make 25 one word questions of Ch 5.	Write a short note on the National Archives of India.	
Sunday 23rd June	PROJECT OF THE WEEK	PROJECT OF THE WEEK	

Day/Date	Maths	Reasoning	Check List
Monday 17th June	While going for a trip to your relatives observe the various types of the signboard on the road. Note which type of shape(board) is used for STOP, RAILWAY CROSSING, SPEED LIMIT, PARKING, SPEED BREAKER, BUS STOP.	QUESTION-12	
Tuesday 18th June	Measure the dimensions of each room with the help of your parents and depict the area of each rooms and hence the area of your house.	QUESTION-13	
Wednesday 19th June	Write down the biography of a great mathematician	QUESTION-14	
Thursday 20th June	Write 12 name of different type of shapes and categories them as 2D and 3D shapes.	QUESTION-15	
Friday 21st June	QUESTION-1 Solve the following puzzle	QUESTION-16	
Saturday 22nd June	QUESTION-2 Solve puzzle	QUESTION-17	
Sunday 23rd June	PROJECT OF THE WEEK	PROJECT OF THE WEEK	

Day/Date	Computer	Sanskrit	Check List
Monday 17th June			

Day/Date			
Tuesday 18th June		प्र-3 पाठ 1, 2, 3 व धातु रूप याद कीजिए वद् , रक्ष् , भु	
Wednesday 19th June			
Thursday 20th June			
Friday 21st June	Read ch 3 and make 10 very short questions		
Saturday 22nd June	Discuss and search , what is network system a d how it work with examples at home? Like: water supply, transport system .		
Sunday 23rd June	PROJECT OF THE WEEK	PROJECT OF THE WEEK	

Day/Date	Fine Arts	Check List
Monday 17th June		
Tuesday 18th June		
Wednesday 19th June	Make a beautiful portrait & shade with pencil use like 2b 4b 6 b 8 b	
Thursday 20th June		
Friday 21st June		
Saturday 22nd June		
Sunday 23rd June	PROJECT OF THE WEEK	

Week - 4 (24th June to 30th June)

PROJECT OF THE WEEK:
- Prepare a PowerPoint Presentation on how you spent your summer holidays and share it with your class teacher.

OBJECTIVE:
- To help students summarise the complete data that they collected during holidays.
- To help students have a better understanding of computers.

Day/Date	Hindi	English	Check List
Monday 24th June	अपठित गद्यांश 8 कीजिए।	Write and learn 50 irregular verbs	
Tuesday 25th June	भारत के पांच महान वैज्ञानिकों के नाम लिखिए ।	Write and learn 51-100 irregular verbs	
Wednesday 26th June	विश्व के पांच महान वैज्ञानिकों के नाम लिखिए ।	Write and learn 100-150 irregular verbs	
Thursday 27th June	अपठित गद्यांश 9 कीजिए।	Write and learn 151-200 irregular verbs	
Friday 28st June	भारतीय संविधान से मान्यता प्राप्त 22 भाषाओं को भारत के मानचित्र पर उनके क्षेत्र के अनुसार दर्शाए। इसके लिए अलग-अलग रंगों का प्रयोग कर सकते हैं।	Share your holidays with us. You can supplement it with photographs and souvenirs from your trip. E.g., ifyou visit the beach, you can stick shells into your journal or if you went to a mountain, you can stick a fern or a flower to support your work, even a ticket stub would be nice.	
Saturday 29th June	अपठित गद्यांश 10 कीजिए।	Make a POSTER for your bathroom to remind yourself and other family members mentioning at least five ways to save water at home.	
Sunday 30th June	PROJECT OF THE WEEK	PROJECT OF THE WEEK	

Day/Date	Science	Social Studies	Check List
Monday 24th June	Make a PPT of Ch 4 or 5. **OR** Make assignment of Ch. 5	Read Ch-2 (Civics) Write important points of Ch-2	
Tuesday 25th June	Prepare a topic for seminar and explaining to your family and make a vedio and send it to your teacher.	Activity - Collect pictures of the members of the Drafting Committee and paste them in your P.N.B	

Wednesday 26th June	Make any 2 project :- Kaleidoscope,periscope,vaccum cleaner and bio gas plant working modal.	Learn and Write exercise of Ch-2	
Thursday 27th June	Project work..	Learn and Write Questions/Answer of Ch-2	
Friday 28th June	Find the 5 give reason Q/Ans.	Map work -Mark all the states and it's capitals in Indian Political Map	
Saturday 29th June	Read other book of science and write some important thing regarding Ch 4 and 5.	World Map - Mark all Continents and Oceans in the world map.	
Sunday 30th June	PROJECT OF THE WEEK	PROJECT OF THE WEEK	

Day/Date	Maths	Reasoning	Check List
Monday 24th June	WORKSHEET-1	QUESTION-18	
Tuesday 25th June	WORKSHEET-2	Solve 15 questions from chapter 1 (analogy) of your book	
Wednesday 26th June	Start the stopwatch. Multiply all the digits of keypad of your mobile phone. How long it took to get the answer.? Mention your time. What does this multiplication indicate.	QUESTION-19	
Thursday 27th June	WORKSHEET-3	Solve 20 questions from chapter 2	
Friday 28th June	WORKSHEET-4	QUESTION-20	
Saturday 29th June	Maintain your notebook and book by covering it (if not covered) and make sure you have completed your holiday homework.	Revise chapter 2 to 5 from your book	
Sunday 30th June	PROJECT OF THE WEEK	PROJECT OF THE WEEK	

Day/Date	Computer	Sanskrit	Check List
Monday 24th June			
Tuesday 25th June		पाठ 1, 2, 3 शब्दार्थ सहित याद कीजिए।	

Day/Date			
Wednesday 26th June			
Thursday 27th June			
Friday 28th June	Read ch 4 and make 10 very short questions.		
Saturday 29th June	Make a list of AI based machine with pictures and it's benefits and disadvantages.		
Sunday 30th June	PROJECT OF THE WEEK	PROJECT OF THE WEEK	

Day/Date	Fine Arts	Check List
Monday 24th June		
Tuesday 25th June	Make any 2 birds us colourful paper .	
Wednesday 26th June		
Thursday 27th June		
Friday 28st June		
Saturday 29th June		
Sunday 30th June	PROJECT OF THE WEEK	

REASONING

QUESTION-1

MATH PUZZLE - EASY

ROCHAK PATHSHALA

If

$$4 + 5 = 11$$
$$6 + 8 = 28$$
$$7 + 9 = 40$$

Then

$$16 + 18 = ?$$

QUESTION-2

CLUES:

$$\triangle + \triangle = 6$$

$$\bigcirc + \blacksquare = 8$$

$$\triangle + \bigcirc = 4$$

$$\blacksquare + \blacklozenge = 10$$
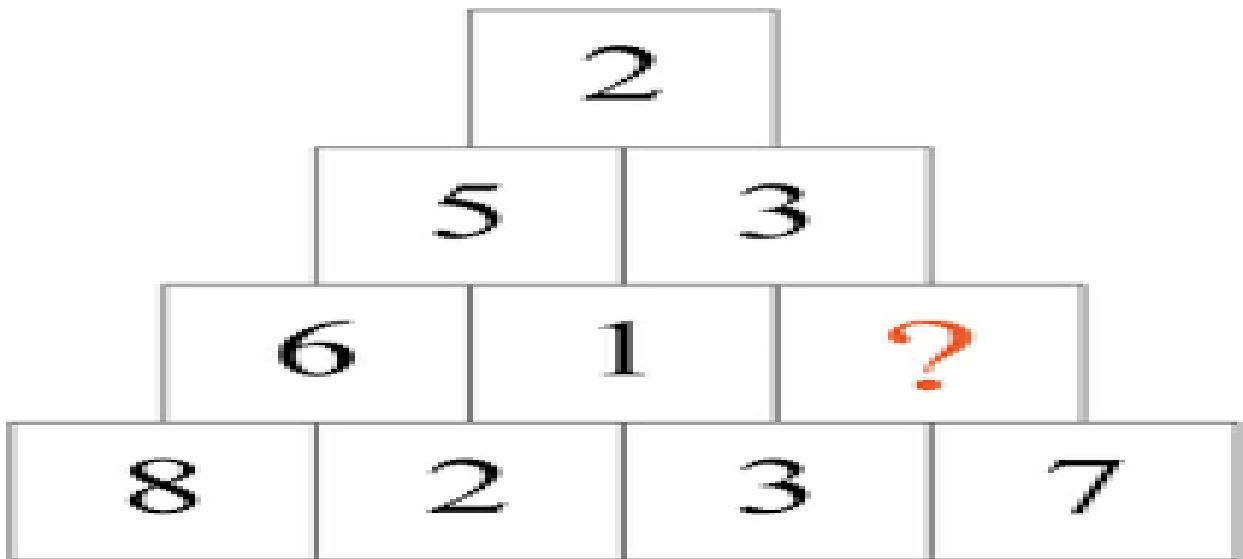
$$\triangle + \blacksquare + \blacklozenge = ?$$

$$\bigcirc + \blacksquare + \triangle = ?$$

$$\blacksquare + \blacksquare + \blacklozenge = ?$$

$$\triangle + \blacksquare + \blacklozenge + \bigcirc = ?$$

QUESTION-3

		2		
	5		3	
	6	1	?	
8	2	3	7	
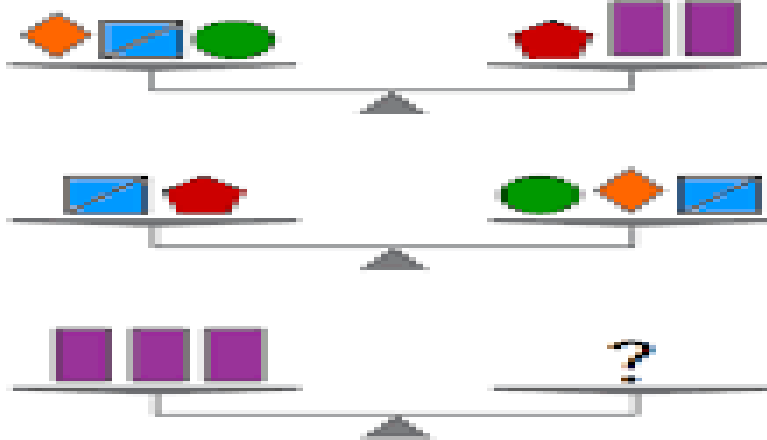
QUESTION-4

QUESTION-5

Find the value of each icon in the multiplication table below:

	2	
1	(lips)	(green hand)
3	(bat)	9
(bat)	12	(moon)

(potion)	(green hand)	(bat)	(lips)	(moon)

QUESTION-6

```
      9
  5   6   6
      8
```

```
      8
  2   8   1
      3
```

```
      6
  4   ?   5
      7
```

QUESTION-7

How many triangles ?
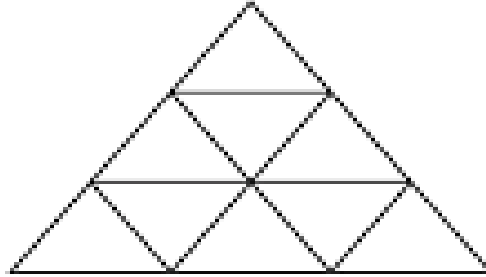
Options :

A) 9   B) 10   C) 11   D) 12   E) 13

QUESTION-8

What is missing in the last grid?

?
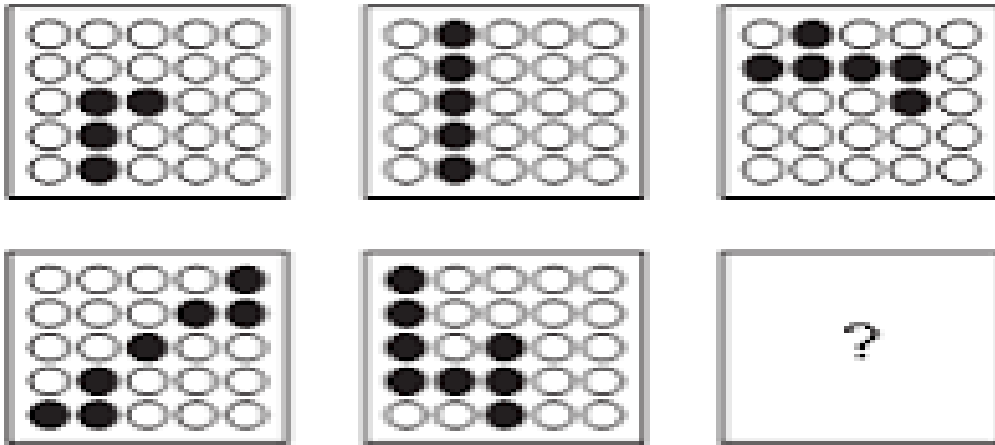
A   B   C   D   E   F

QUESTION-9

Math reasoning
Puzzle 304

$35 = 23$

$46 = 34$

$57 = 47$

$79 = \text{??}$

Share it if you solve it

QUESTION-10

www.test4exams.com

99% of People fail to answer

$4 + 8 = 5$

$8 + 5 = 4$

$6 + 7 = 6$

$9 + 9 = ?$

APTITUDE || REASONING || GK & CURRENT AFFAIRS || PUZZLE

QUESTION-11

Which letter replaces the question mark?

6	4
4	N

4	1
L	7

5	U
6	10

?	1
14	2
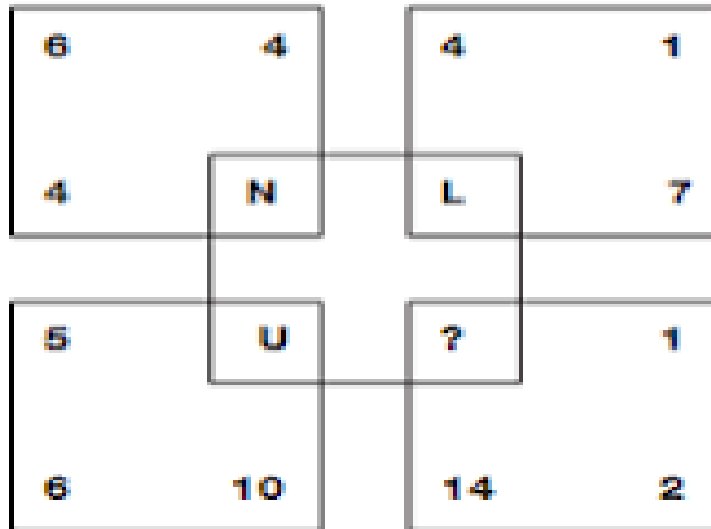
QUESTION-12

CLUES:

△ + △ = 6

○ + ■ = 8

△ + ○ = 4

■ + ◇ = 10

△ + ■ + ◇ = ?

○ + ■ + △ = ?

■ + ■ + ◇ = ?

△ + ■ + ◇ + ○ = ?

Mom Junction

QUESTION-13

Find The Missing Number


```
       ??
     60  20
   12   4   4
  4   2   1   3
```
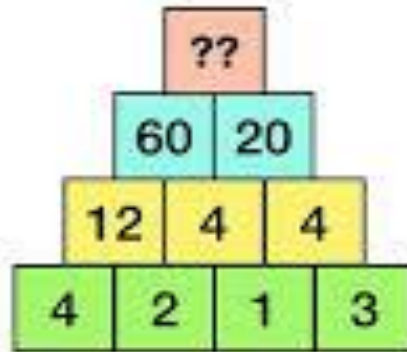
QUESTION-14

5 X 3 = 51

Solve this

5 X 5 = 52

5 X 4 = 02

5 X 3 = 51

5 X 6 = ??

QUESTION-15

$$1\ 2\ 3\ 4 = 55$$
$$4\ 3\ 1\ 2 = 46$$
$$3\ 6\ 2\ 4 = 87$$
$$5\ 2\ 7\ 3 = ?$$
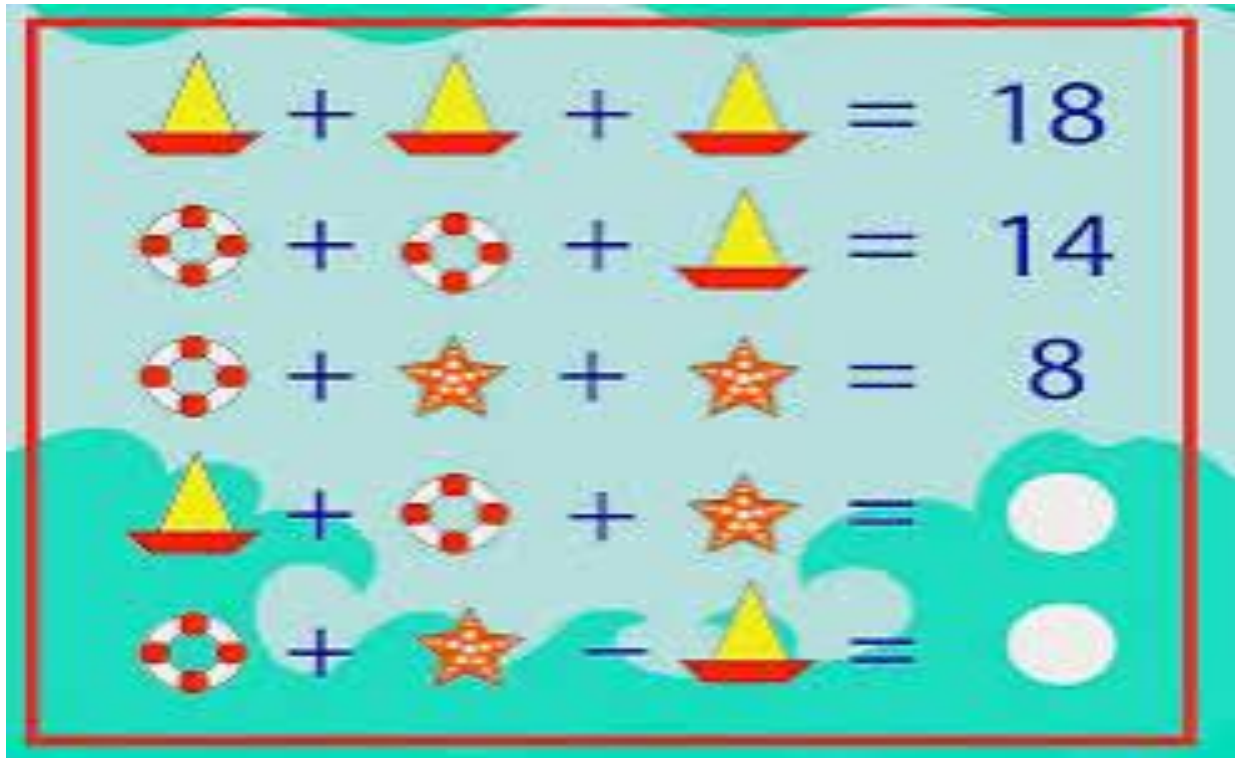
QUESTION-16

QUESTION-17

$$\text{apple} \times \text{apple} \times \text{apple} = 27$$

$$\text{apple} \times \text{lemon} \times \text{lemon} \times \text{lemon} = 24$$

$$\text{apple} \times \text{lemon} \times \text{orange} \times \text{orange} = 96$$

$$\text{orange} + \text{apple} \times \text{lemon} = ?$$

QUESTION-18

CLUES:

$$\triangle + \triangle = 6$$

$$\bigcirc + \blacksquare = 8$$

$$\triangle + \bigcirc = 4$$

$$\blacksquare + \diamondsuit = 10$$

$$\triangle + \blacksquare + \diamondsuit = ?$$

$$\bigcirc + \blacksquare + \triangle = ?$$

$$\blacksquare + \blacksquare + \diamondsuit = ?$$

$$\triangle + \blacksquare + \diamondsuit + \bigcirc = ?$$

MomJunction

QUESTION-19

$$\text{banana} + \text{banana} = 30$$
$$\text{cherries} + \text{cherries} = 20$$
$$\text{apple} + \text{apple} = 8$$
$$\text{banana} + \text{cherry} \times \text{apple} = \; ?$$

QUESTION-20

MATH PUZZLE - EASY

ROCHAK PATHSHALA
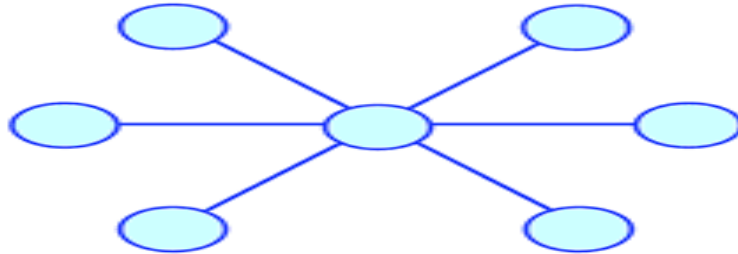
If

$$4 + 5 = 11$$
$$6 + 8 = 28$$
$$7 + 9 = 40$$

Then

$$16 + 18 = \; ?$$

MATHS

QUESTION-1

Puzzle time

Seven up!

Put the numbers

1, 2, 3, 4, 5, 6 and **7**

in the circles so that each
straight line of three numbers
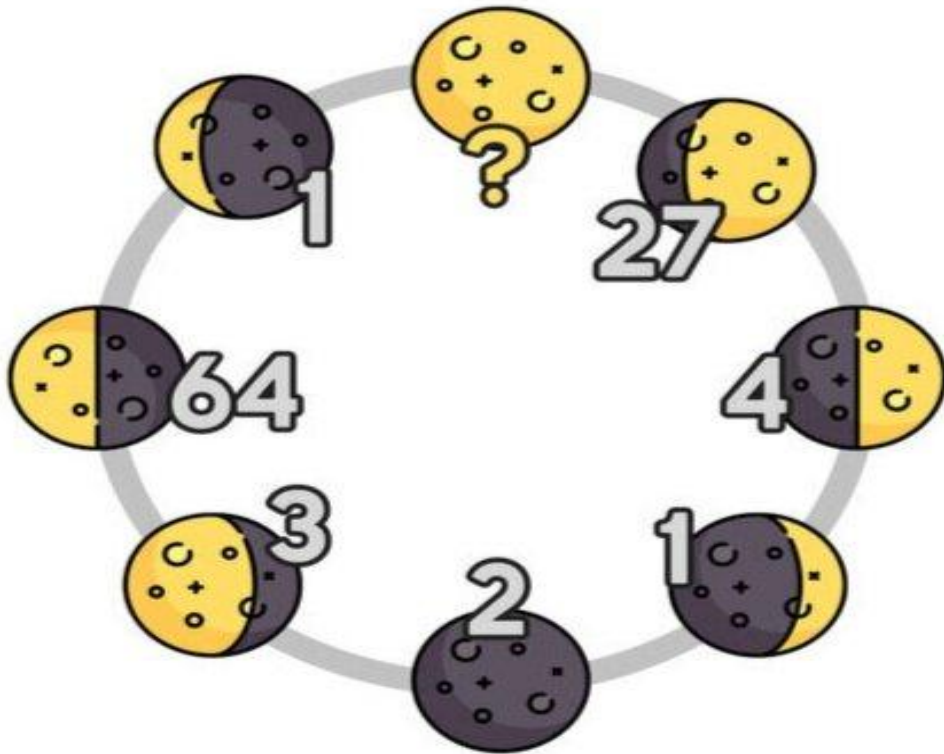adds up to the same total.

THE FRUIT FACTOR

Each of the fruits in the digrams below are equal to one
of the following whole numbers: **1   2   3   5**

Find the value of each fruit so that both of the following would be true:

QUESTION-2

There are 20 people in a room.

If they shake each other's hands once and only once, how many handshakes are there all together?
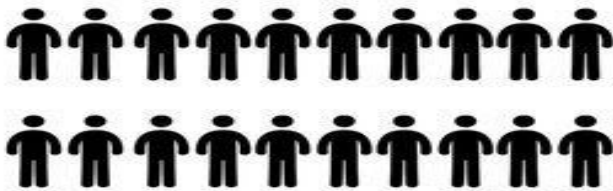
WORKSHEET-1

I. MULTIPLE CHOICE QUESTIONS (MCQ)

For each question, there are four Options, out of which one is correct. Choose the correct

1. The value of $\left\{\left(\dfrac{2}{-3}\right)^{-3}\right\}^{2}$ is

(a) $\dfrac{64}{729}$ 　　　　(b) $\dfrac{-64}{729}$ 　　　　(c) $\dfrac{729}{64}$ 　　　　(d) $\dfrac{-3}{4}$

2. The value of $\left(-\dfrac{3}{8}\right)^{-3} \times \left(\dfrac{4}{9}\right)^{-2}$ is

(a) $\dfrac{1}{96}$ 　　　　(b) $-\dfrac{8192}{2187}$ 　　　　(c) -96 　　　　(d) $\dfrac{-3}{392}$

3. The value of $\left(\dfrac{1}{2}\right)^{-2} + \left(\dfrac{2}{3}\right)^{-2} + \left(\dfrac{3}{4}\right)^{-2}$ is

(a) $\dfrac{141}{36}$ 　　　　(b) $\dfrac{313}{72}$ 　　　　(c) $\dfrac{27}{4}$ 　　　　(d) $\dfrac{289}{36}$

4. The value of $(3^{-1} + 4^{-1})^{-1} \div 5^{-1}$ is

(a) $\dfrac{60}{7}$ 　　　　(b) $\dfrac{7}{10}$ 　　　　(c) $\dfrac{4}{5}$ 　　　　(d) $\dfrac{11}{15}$

5. In $\left(\dfrac{5}{12}\right)^{-4} \times \left(\dfrac{5}{12}\right)^{3x} = \left(\dfrac{5}{12}\right)^{5}$, the value of x is

(a) 3 　　　　(b) 1 　　　　(c) -2 　　　　(d) -1

6. If $(2^{3x-1} + 10) \div 7 = 6$, the value of x is

(a) 0 　　　　(b) -2 　　　　(c) 1 　　　　(d) 2

7. The value of $(4^{-1} + 8^{-1}) \div \dfrac{1}{\left(\dfrac{3}{2}\right)^{-3}}$ is

(a) 6 　　　　(b) $\dfrac{1}{9}$ 　　　　(c) $\dfrac{-2}{9}$ 　　　　(d) -8

8. If $\left[\left(\dfrac{2}{3}\right)^{-2}\right]^{3} \times \left(\dfrac{3}{2}\right)^{2n} = \left(\dfrac{4}{9}\right)^{2}$, the value of n is

(a) $\dfrac{-1}{2}$ 　　　　(b) $\dfrac{3}{8}$ 　　　　(c) -5 　　　　(d) -6

value of the difference of two ~~...~~

10. Simplify and write as a rational number of the form $\dfrac{p}{q}$:

(i) $\dfrac{15}{2} + \dfrac{-11}{3} + 6 + \dfrac{-7}{6} + \dfrac{9}{8}$

(ii) $\dfrac{6}{7} + 1 + \dfrac{-7}{9} + \dfrac{-12}{7} + \dfrac{19}{21}$

II. MENTAL MATHEMATICS

1. Which rational number has no reciprocal ?

2. Which rational number is its own opposite ?

3. By what number should we multiply $\dfrac{-1}{6}$ so that the product may be $\dfrac{-23}{9}$?

4. Find six rational numbers between $\dfrac{3}{8}$ and $\dfrac{-1}{2}$.

HOTS *Higher Order Thinking Skills*

1. How many rational numbers exist between any two distinct rational numbers ?

2. Is $(4 \div 2) = (2 \div 4)$? What does it show ?

3. Is 0.3 the multiplicative inverse of $3\dfrac{1}{3}$? Why or why not ?

4. Using appropriate properties find :

$$\dfrac{-2}{3} \times \dfrac{3}{5} + \dfrac{5}{2} - \dfrac{3}{5} \times \dfrac{1}{6}$$

5. For any two rational numbers x and y, which of the following statements is (are) correct ?

(i) $x > y$ (ii) $x = y$ (iii) $x < y$

(a) Only (i) is correct.
(b) Only (iii) is correct.
(c) (ii) and (iii) are correct.
(d) All the three are correct.

VALUE-BASED QUESTIONS

1. How many pieces of rope of each $5\dfrac{1}{6}$ metres long can be cut from a rope of $77\dfrac{1}{2}$ metres long ?

2. If area of a rectangle is $\dfrac{120}{49}$ cm² and one of its sides is $\dfrac{10}{7}$ cm, find the length of other side.

WORKSHEET-3

II. TRUE / FALSE

1. We can insert as many rational numbers as we want between -2 and $\frac{1}{3}$.

2. The product of two rational numbers is always a positive integer.

3. All rational numbers can be represented on a number line.

4. '0' is the only rational number whose additive inverse is the number itself.

5. $-\frac{2}{3}$ lies on the right of 0 on the number line.

6. The product of zero and a rational number is 1.

7. $\frac{1}{2} \times \frac{3}{2} = \frac{3}{2} \times \frac{1}{2}$

8. Zero is not the reciprocal of any number.

9. The product of 1 and a rational number is the rational number itself.

10. The additive inverse of $\frac{-6}{-17}$ is $\frac{-17}{6}$.

III. FILL IN THE BLANKS

1. For any rational number a $(a \neq 0)$, $a \div (-a) =$ _____ .

2. $\frac{-2}{15} + \frac{7}{12} = \frac{7}{12} +$ _____ .

3. The percentage of the least to the greatest of the numbers in $\frac{3}{7}, \frac{1}{7}, \frac{2}{7}, \frac{4}{7}$ is _____ .

4. The denominator of a rational number cannot be _____ .

5. If $\frac{-2}{5} = \frac{13}{x}$, then $x =$ _____ .

6. The sum of two rational numbers is always a _____ number.

7. The difference of two rational numbers is a _____ number.

8. Three or more rational numbers can be added by grouping them in _____ order.

9. _____ is called the identity element for addition of rational numbers.

10. The sum of any rational number and _____ is the rational number itself.

IV. MATCH THE COLUMNS

1.

Column A	Column B
(a) $\left| \frac{2}{3} - \frac{3}{4} \right|$ is equal to _____ .	(p) $\frac{1}{12}$
(b) The additive inverse of $\frac{-3}{5} =$ _____ .	(q) $\frac{-1}{12}$
(c) The multiplicative inverse of $-\frac{2}{7}$ is _____ .	(r) $\frac{3}{5}$
(d) A rational number between $\frac{1}{2}$ and $-\frac{1}{3}$ is _____ .	(s) $\frac{7}{-2}$

WORKSHEET-4

I. MULTIPLE CHOICE QUESTIONS (MCQ)

For each question, there are four Options, out of which one is correct. Choose the correct one :

1. If $x = \dfrac{1}{2}$ and $y = \dfrac{-1}{2}$, then

   (a) $x + y > 0$
   (b) $x - y < 0$
   (c) $x - y = 1$
   (d) $x + y = 1$

2. Which of the following rational numbers is in the standard form ?

   (a) $\dfrac{-9}{16}$
   (b) $\dfrac{-49}{91}$
   (c) $\dfrac{-12}{26}$
   (d) $\dfrac{28}{-105}$

3. The reciprocal of a negative rational number

   (a) is a positive rational number.
   (b) is a negative rational number.
   (c) does not exist.
   (d) can be either a positive or a negative rational number.

4. The value of $\left(-\dfrac{9}{16} \times \dfrac{24}{27} \right)$ is

   (a) $\dfrac{-1}{3}$
   (b) $\dfrac{-3}{7}$
   (c) $\dfrac{-5}{12}$
   (d) $\dfrac{-1}{2}$

5. If $x = \dfrac{-3}{5}$ and $y = \dfrac{2}{7}$, then which of the following is correct ?

   (a) $|x \times y| = |x| \times |y|$
   (b) $|x \times y| < |x| \times |y|$
   (c) $|x \times y| > |x| \times |y|$
   (d) None of these

6. If the price of 10 pens is ₹ $158\dfrac{1}{2}$, then the price of such 1000 pens is

   (a) ₹ 12580
   (b) ₹ 15580
   (c) ₹ 15850
   (d) ₹ 15650

7. The sum of two rational numbers is -3. If one of the numbers is $-\dfrac{10}{3}$, the other number is

   (a) $\dfrac{11}{3}$
   (b) $\dfrac{-17}{3}$
   (c) $\dfrac{-1}{3}$
   (d) $\dfrac{1}{3}$

8. What number should be subtracted from $-\dfrac{3}{5}$ to get -3 ?

   (a) $\dfrac{-7}{5}$
   (b) $\dfrac{12}{5}$
   (c) $\dfrac{7}{5}$
   (d) $\dfrac{-13}{5}$

9. If -1 is obtained on doubling a rational number, then the rational number is

   (a) 2
   (b) $\dfrac{-1}{4}$
   (c) $\dfrac{1}{2}$
   (d) $\dfrac{-1}{2}$

10. The multiplicative inverse of 0 is

    (a) 0
    (b) 1
    (c) $\dfrac{0}{1}$
    (d) not existing