

# *Dr. Kitchlu Public Sen. Sec. School, Moga*

## **Holidays Homework**

**Class – VIII**

**Session 2023-24**

- *This is the time to relax in the cool comfort at home.*
- *Do some physical activity or exercises during morning or evening time.*
- *Spend some quality time with your parents and grandparents and learn something from them to enhance your knowledge.*

***“Learning by doing is growing and succeeding”***

- *Keeping this in mind we have planned some fun filled creative activities for you during the vacation.*
- *Try to work independently. However, take help & guidance from your parents wherever required.*
- *Make a time schedule to study for specific hours every day.*

**Read the specifications given for each subject and complete the written work. Revise the work done in all the subjects.**

**Submit the holiday's homework on 6<sup>th</sup> July, 2023 at 9:00 A.M.**

## Instructions for Holidays H.W

1. Worksheets given in pdf format can be printed or drawn on notebooks.
2. Homework can be done on printed worksheets wherever space is available. A separate test note book may also be used for doing the work by making such worksheets at one's own.
3. All pages of **Scrap Book** must be filled as directed by the teacher.
4. Making of a chart paper.
  - (a) Use the size of chart paper as instructed by the subject teacher. (Note: half size chart paper for III-IV full size chart paper from V onwards.
  - (b) Use the Portrait/ Vertical side of the chart paper only.
  - (c) Draw the margin on the chart paper.
  - (d) Use full space of the chart paper for completing the task. Draw/Paste pictures of large size.
  - (e) Use any medium of colours as instructed by the teacher.
  - (f) Write all the details in correct spellings. Use big letters for writing.
  - (g) Write your name, roll no, class, section at the bottom of right side.

### Colour of chart paper

- Science – Yellow
- Social Studies – Pink
- Maths – White
- Hindi – Green
- Punjabi – Black
- English – Blue

## *Instructions for making a Model*

- 1. Do thorough research on the chosen topic to gather relevant information.*
- 2. Make a list of all the materials needed for a model. Then collect the required items, ensuring that are easily available, economical and safe to use.*
- 3. Clearly define the objectives of the working model and its introduction.*
- 4. Take necessary precautions especially dealing with electricity or sharp objects.*
- 5. The base (either cardboard or thermocole) of the model should be covered with a chart paper or use plyboard (in case of heavy Model)*
- 6. Labelling should be done and it must be clearly visible. (Pla-card/ charts can be used)*
- 7. For both working and Non- working models, prepare a written report on chart regarding concepts and principles associated with the topic. Use reasonably big letters to write on chart paper.*
- 8. The explanation of the model should be informative, Knowledgeable, effective and in English only.*
- 9. You can assemble the different components of the model in the school if it is bigger in size.*

## Subject – English

1. Do 3 – 6 reading comprehensions in BBC (page no.16 to 29)
2. Complete the assignments of past tense in BBC (page no.273 to 281)
3. Complete the informal letters 3 – 7 in BBC. (Page no.120 to 216)
4. Make a project on Sindhu Thai – The Mother of Orphans. (Use assignment sheets)

## Subject – Hindi

1. कल्पना कीजिए आप एक वृक्ष है और दूसरे वृक्ष मित्र से बात कर रहे हैं आपकी बातचीत का विषय वृक्षों की कटाई की समस्या है। इस बातचीत को संवाद के रूप में लिखिए।

2. दिए गए संकेत के आधार पर कहानी लिखिए। (100 से 120 शब्दों में)

एक बार की बात है, किसी गाँव के एक मंदिर में हरी राम शर्मा नाम का एक पुजारी रहता था - - - - -

3. आपके मामा जी विदेश से भारत आए हैं। आप उनसे वहाँ के प्रसिद्ध व्यंजनों की जानकारी लेकर उनकी सूची बनाइए तथा किसी एक व्यंजन को बनाने की विधि पूर्ण रूप से लिखिए।

4. गर्मी के मौसम में प्रचलित 'आम रस' नामक कोल्ड ड्रिंक के लिए सुंदर व आकर्षक विज्ञापन तैयार कीजिए।

5. दी गई वर्ग पहेली में से पूछे गए प्रश्नों के उत्तर ढूँढ कर लिखिए।

दे	दी	व्या	क	र	ण	रा	मों
व	हिं	दी	क	वै	मा	स	खि
ना	दा	खु	खी	ना	ग्ला	आ	क
ग	ज	मु	न	का	षा	ली	आ
री	रु	म	लि	खि	त	आ	षा
गु	शै	आ	पि	षा	अं	ग्रे	जी

(क) भारत की राष्ट्रभाषा है। \_\_\_\_\_

(ख) भाषा के शुद्ध रूप का ज्ञान करवाता है। \_\_\_\_\_

(ग) अंतरराष्ट्रीय भाषा है। \_\_\_\_\_

(घ) हिंदी भाषा की लिपि \_\_\_\_\_

(ङ) बोलना और सुनना भाषा का रूप है। \_\_\_\_\_

नोट :- उपरोक्त दिया गया सारा कार्य एक अलग हिंदी अभ्यास पुस्तिका (T.N.B) पर करना है।

## Subject – Punjabi

- 1) ਭਾਸ਼ਾ ਜਾਂ ਬੋਲੀ ਦੀ ਪਰਿਭਾਸ਼ਾ ਤੇ ਕਿਸਮਾਂ ਦੱਸ ਕੇ ਉਹਨਾਂ ਸੰਬੰਧੀ flow chart ਬਣਾਓ ਅਤੇ 1-1 ਤਸਵੀਰ ਲਗਾ ਕੇ TNB ਉੱਪਰ ਲਿਖੋ।
- 2) ਛੁੱਟੀਆਂ ਵਿੱਚ ਤੁਸੀਂ ਜਿੱਥੇ ਵੀ ਘੁੰਮਣ ਜਾ ਰਹੇ ਹੋ, ਉਸ ਸਥਾਨ ਸੰਬੰਧੀ ਆਪਣਾ ਤਜਰਬਾ 100-150 ਸ਼ਬਦਾਂ ਵਿੱਚ ਲਿਖੋ।
- 3) ਕੋਈ ਅਜਿਹੇ ਦੋ ਤਿਉਹਾਰਾਂ ਦਾ ਵਰਨਣ ਕਰੋ, ਜਿਹਨਾਂ ਨੂੰ ਅਸੀਂ ਤਿਉਹਾਰ ਅਤੇ ਮੇਲਾ ਦੋਵੇਂ ਰੂਪਾਂ ਵਿੱਚ ਮਨਾਉਂਦੇ ਹਾਂ। ਤਸਵੀਰਾਂ ਸਹਿਤ ਵਰਨਣ ਕਰਦੇ ਹੋਏ ਟੈਸਟ ਕਾਪੀ ਵਿੱਚ ਲਿਖੋ।
- 4) ਆਪਣੇ ਜੀਵਨ ਨਾਲ ਸੰਬੰਧਿਤ ਕੋਈ ਸਿੱਖਿਆਦਾਇਕ ਕਹਾਣੀ ਲਿਖਦੇ ਹੋਏ, ਉਸ ਵਿੱਚੋਂ ਨਾਂਵ, ਪੜਨਾਂਵ ਅਤੇ ਵਿਸ਼ੇਸ਼ਣ ਚੁਣ ਕੇ ਲਿਖੋ ਅਤੇ ਨਾਲ ਹੀ ਨਾਂਵ ਸ਼ਬਦਾਂ ਦੀਆਂ ਤਸਵੀਰਾਂ ਲਗਾਓ।
- 5) ਸ਼ਬਦਾਂ ਦੀ ਖੇਡ :

- ੳ) ਕਵੀ
- ਅ) ਵਾਰਤਕਕਾਰ
- ੲ) ਹਾਕੀ ਦਾ ਖਿਡਾਰੀ
- ਸ) ਮਹਾਨ ਸ਼ਹੀਦ
- ਹ) ਮੋਗਾ ਤੇ ਬਠਿੰਡਾ ਦੇ ਖੇਤਰ
- ਕ) ਉੱਡਣਾ ਸਿੱਖ
- ਖ) ਮਾਘੀ ਦਾ ਮੇਲਾ

ਕ				
ਹ	ੳ			
ਅ				
ਸ				
ਖ				

ਨੋਟ : ਦਿੱਤਾ ਗਿਆ ਸਾਰਾ ਕਾਰਜ ਟੈਸਟ ਕਾਪੀ ਵਿੱਚ ਕੀਤਾ ਜਾਵੇ।

## Subject – Mathematics

*Solve the sums on the given worksheets. You may also use separate test note book for solving sums if space is not available on worksheets.*

### CH – 1 (RATIONAL NUMBERS)

**Do all the sums on separate test notebook.**

1. MCQ tick the correct option
  - i. What should be subtracted from  $-3/4$  to get  $-4$ ?  
(a)  $13/4$  (b)  $-13/4$  (c) 13 (d)  $4/13$
  - ii. '0' is not \_\_\_\_  
(a) a natural number. (b) a whole number.  
(c) an integer. (d) a rational number
  - iii. Which of the following is the multiplicative identity for rational numbers?  
(a) 1 (b) -1 (c) 0 (d) None of these
  - iv. The additive identity for rational numbers is  
(a) 1 (b) -1 (c) 0 (d) None of these

- v. Which of the following is the product of  $(-7/8)$  and  $(2/21)$   
 (a) 12 (b)  $-63/16$  (c)  $-16/147$  (d)  $-1/12$
2. The multiplicative inverse of a number is also called its .....
3. The sum of  $-1/7$  and  $-1/7$  is .....
4. The product of  $-27/81$  and  $-81/27$  is... ..
5. If  $a = 1/2$ ,  $b = 3/4$ , verify the following:  
 (i)  $a \times b = b \times a$  (ii)  $a + b = b + a$
6. Find a rational number between  $1/2$  and  $1/3$ .
7. Write any 5 rational numbers between  $-5/6$  and  $7/8$ .
8. Calculate the following:  
 (a)  $\frac{-4}{5} \times \frac{3}{7} + \frac{4}{5} \times \frac{3}{7}$  (b)  $\frac{1}{2} \times \frac{5}{6} + \frac{1}{3} \times \frac{1}{4}$
9. Represent the following rational numbers on number line  
 (a)  $-2/3$  (b)  $3/4$  (c)  $3/2$
10. Show that:  $(\frac{-8}{9} \times \frac{1}{-5}) + (\frac{-8}{9} \times \frac{-7}{11}) = \frac{-8}{9} \times (\frac{1}{-5} + \frac{-7}{11})$
11. If the cost of  $4\frac{1}{2}$  litres of milk is Rs.89 $\frac{1}{2}$ , find the cost of 1 litre of milk.
12. The product of two rational numbers is  $15/56$ . If one of the numbers is  $-5/48$ , find the other.
13. Write an equivalent and rational number for each of the following rational numbers fill in the blank shown below with the corresponding letter found below each answer. What you will find is the name of a famous author of children's books who was born almost 100 years ago.

N B Y L E

$$\frac{3}{8} = \frac{?}{16} \quad \frac{14}{20} = \frac{?}{10} \quad \frac{3}{6} = \frac{?}{12} \quad \frac{1}{3} = \frac{?}{6} \quad \frac{6}{8} = \frac{?}{24}$$

I T D O N

$$\frac{5}{10} = \frac{?}{20} \quad \frac{7}{8} = \frac{?}{16} \quad \frac{8}{10} = \frac{4}{?} \quad \frac{1}{4} = \frac{4}{?} \quad \frac{8}{36} = \frac{32}{?}$$

-----

$$\frac{18}{24} \quad \frac{6}{16} \quad \frac{10}{20} \quad \frac{4}{5} \quad \frac{7}{10} \quad \frac{2}{6} \quad \frac{6}{12} \quad \frac{14}{16} \quad \frac{4}{16} \quad \frac{36}{162}$$

### CHAPTER 2 – EXPONENTS AND POWERS

1. Find the multiplicative inverse of the following:  
 a.  $3^{-4}$  b.  $7^{-2}$  c.  $9^{-9}$  d.  $10^{-80}$
2. Expand the following numbers using exponents  
 a. 18964.63 b. 7064.373
3. Simplify and write in exponential form

a.  $(-3)^{-3} \times (-3)^{-2} \times (-3)^{-5}$

b.  $a^{-8} \times a^{-10} \times a^{-2}$

4. Express  $9^{-3}$  as a power with the base 3.

5. Find the value of:

a)  $\left[ \left(\frac{1}{2}\right)^0 + \left(\frac{1}{5}\right)^3 + \left(\frac{2}{3}\right)^2 \right]$

b)  $\left[ \left(\frac{1}{2}\right)^{-2} + \left(\frac{1}{2}\right)^{-3} \right] \div \left(\frac{1}{4}\right)^{-2}$

c)  $\left[ \left(\frac{9}{5}\right)^{-8} \times \left(\frac{5}{9}\right)^5 \right]$

d)  $(9^2 - 4^3) \times \left(\frac{-3}{17}\right)^2 \times \frac{34}{9}$

6. Simplify :

$\left[ \left(\frac{1}{4}\right)^4 + \left(\frac{1}{4}\right)^3 \right] \times \left[ \left(\frac{3}{5}\right)^{12} \div \left(\frac{3}{5}\right)^5 \right]$

7. Find x, if  $\left(\frac{2}{3}\right)^{-5} \times \left(\frac{2}{3}\right)^{12} = \left(\frac{2}{3}\right)^{3x-2}$

8. Simplify :  $\left(\frac{a}{b}\right)^4 \times \left(\frac{4ab}{3a}\right)^2 \times \left(\frac{b}{2a}\right)^3$

9. Evaluate : (a)  $\frac{4^{-1/2} \times 2^{1/2} \times 2}{8 \times 8^{-1/2}}$  (b)  $\frac{(48)^{-2} \times (64)^{1/2}}{(24)^{-1}}$

10. Write the following in standard form:

(a) 0.0000389

(b) 19280000

(c)  $\frac{0.000462}{10^7}$

11. Express the following numbers in usual form:

(a)  $2.08 \times 10^{-5}$

(b)  $381624 \times 10^{-6}$

(c)  $9 \times 10^{-7}$

12. Simplify :

$\left(\frac{2}{3}\right)^3 \times \left(\frac{2}{3}\right)^{-2} \left[ \left(\frac{1}{2}\right)^2 \right]^{-2} \times \frac{1}{24}$

### CH - 3 SQUARE AND SQUARE ROOT

**Do all the sums on separate test notebook.**

MCQ tick the correct options.

(1) Which of the following is a perfect square number.

(a) 453 (b) 8657 (c) 93542 (d) 729

(2) Which of the following is not a Pythagorean triplet?

(a) 6, 8, 10 (b) 8, 15, 17 (c) 2, 5, 7 (d) 5, 12, 13

(3) The smallest number by which 75 should be multiplied so as to get a perfect square is

(a) 2                      (b) 3                      (c) 5                      (d) 7

(4) Which of the following can be a perfect square?

- (a) A number ending in 3 or 7
- (b) A number ending with odd number of zeros
- (c) A number ending with even number of zeros
- (d) A number ending in 2.

(5) The value of  $9^2 - 1$  is equal to:

- (a) 81                      (b) 80                      (c) 79                      (d) None of these

1. Find the perfect square numbers between 40 and 50.

2. Which of the following  $24^2$ ,  $49^2$ ,  $77^2$ ,  $131^2$  or  $189^2$  end with digit 1?

3. Find the value of each of the following without calculating squares.

- (i)  $27^2 - 26^2$                       (ii)  $118^2 - 117^2$

4. Write down the following as sum of odd numbers.

- (i)  $7^2$                       (ii)  $9^2$

5. Find the squares of:

- (i)  $-3/7$                       (ii)  $-9/17$

6. Using property, find the value of the following:

- (i)  $19^2 - 18^2$                       (ii)  $23^2 - 22^2$

7. Find the square root of the following using prime factorization

- (i) 2025                      (ii) 7056

8. The area of a rectangular field whose length is twice its breadth is  $2450 \text{ m}^2$ . Find the perimeter of the field.

9. Find the smallest number by which 3645 should be divided so as to get a perfect square. Also, find the square root of the number so obtained.

11. Find the square root of each of the following numbers by division method.

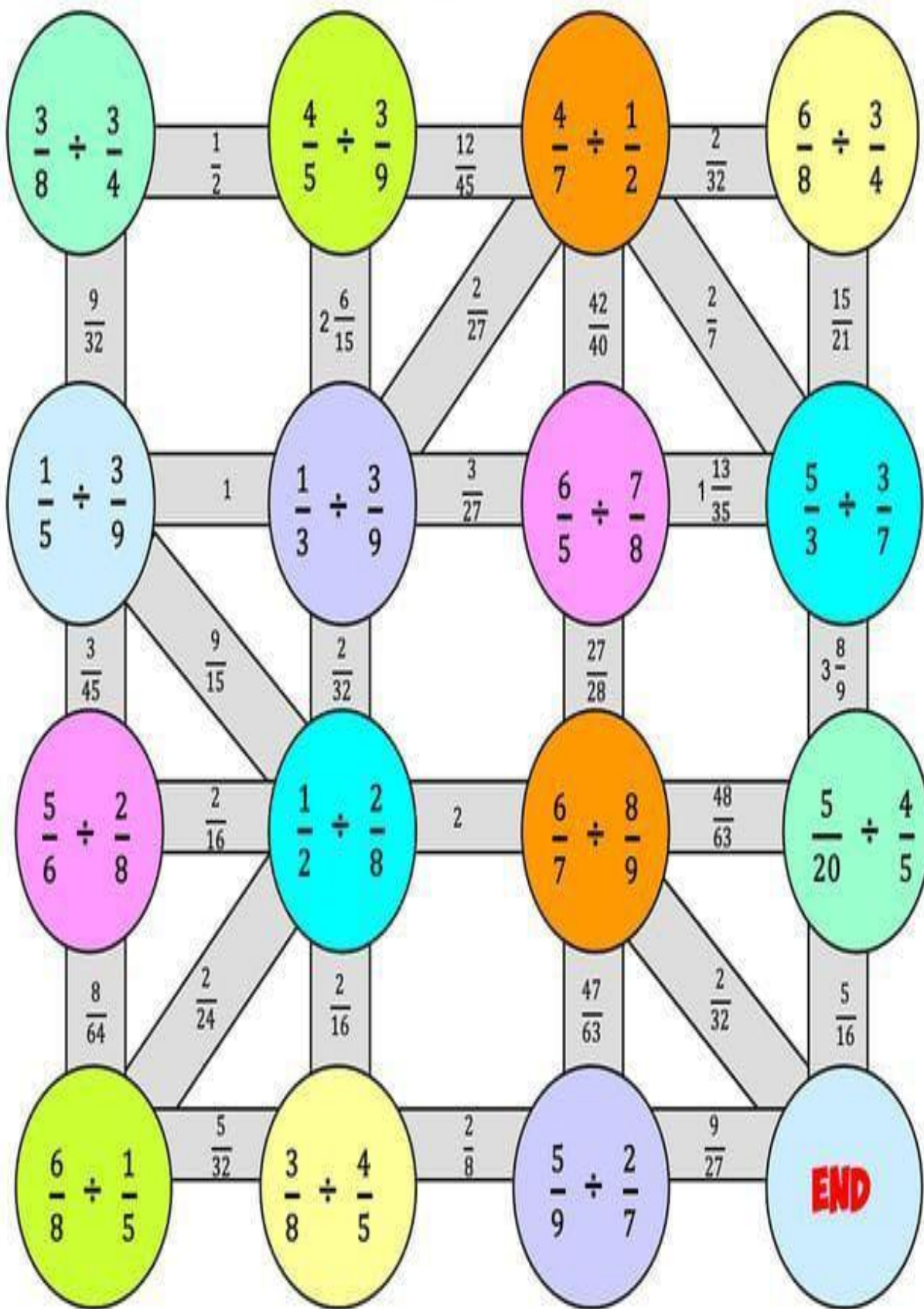
- (i) 2304                      (ii) 4489

12. Write a Pythagorean triplet whose one member is 16.



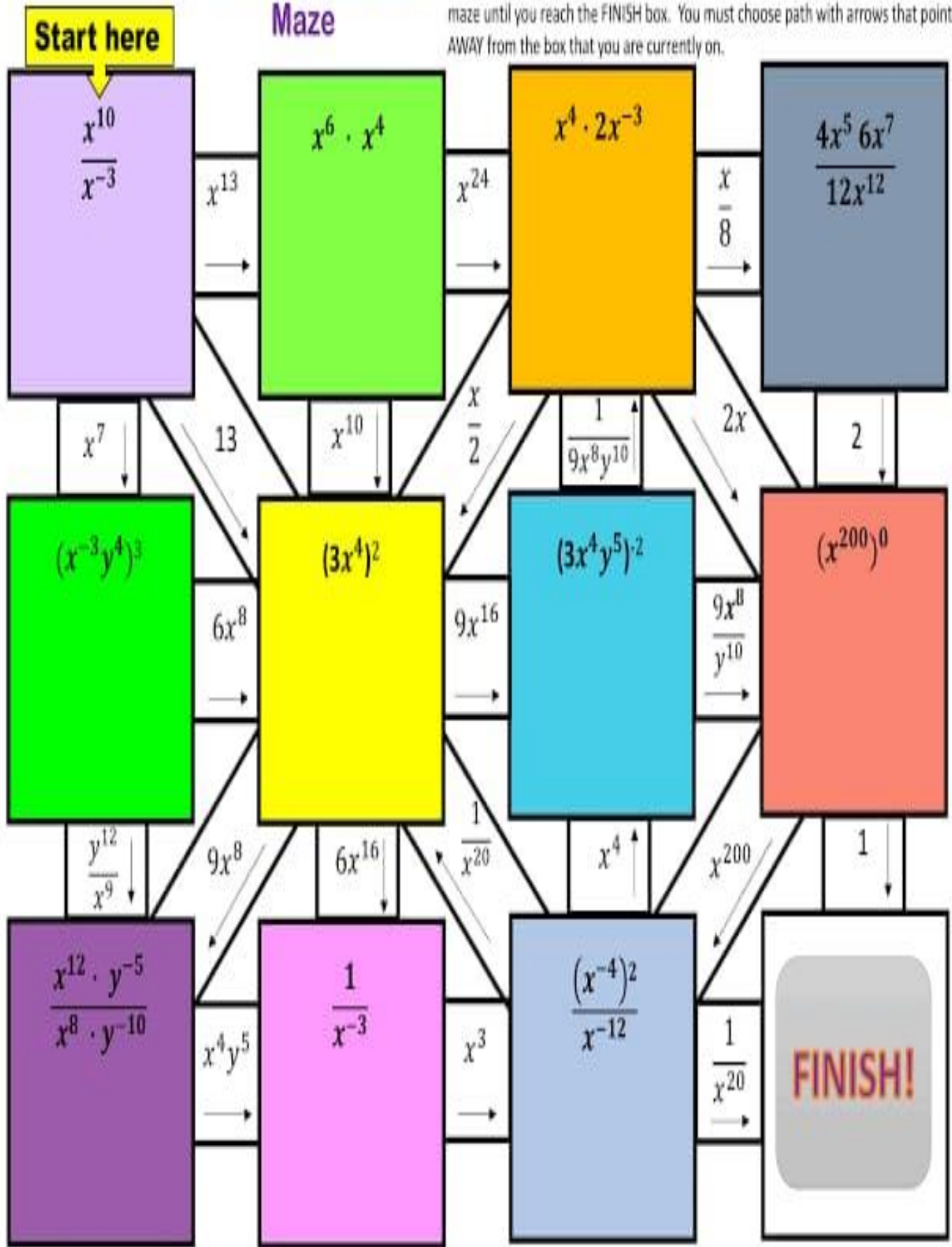
# DIVIDE THE FRACTIONS CORRECTLY TO SOLVE THE MAZE!

**START**




# Rules of Exponents Maze

Directions: Start at the box under the large "start arrow". Evaluate the expressions and show your work. Follow your answer choice to the next box and through the maze until you reach the FINISH box. You must choose path with arrows that point AWAY from the box that you are currently on.

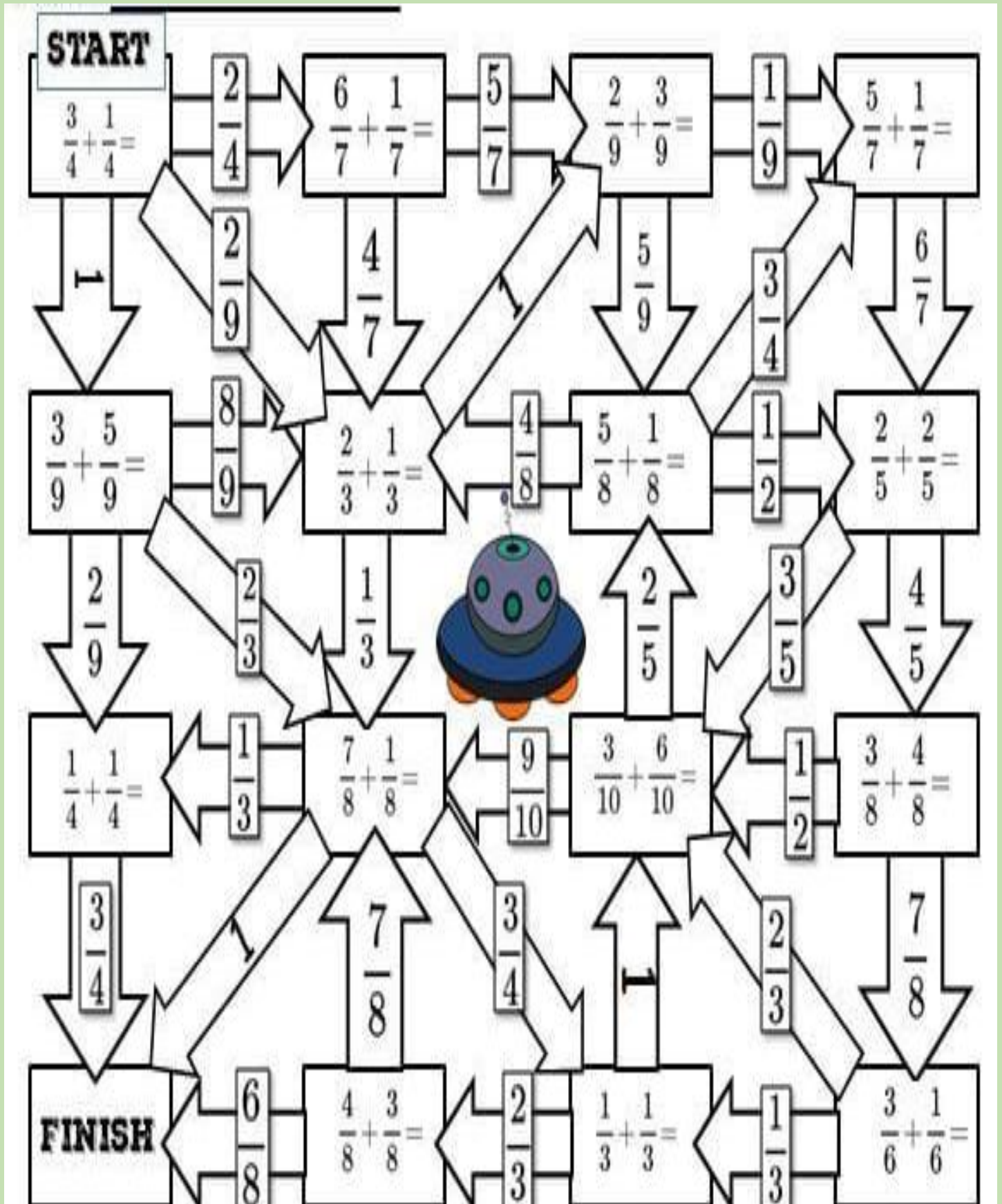


## Negative Exponents

Directions: Find the correct answer. Use your answer to navigate through the maze. Show your work.

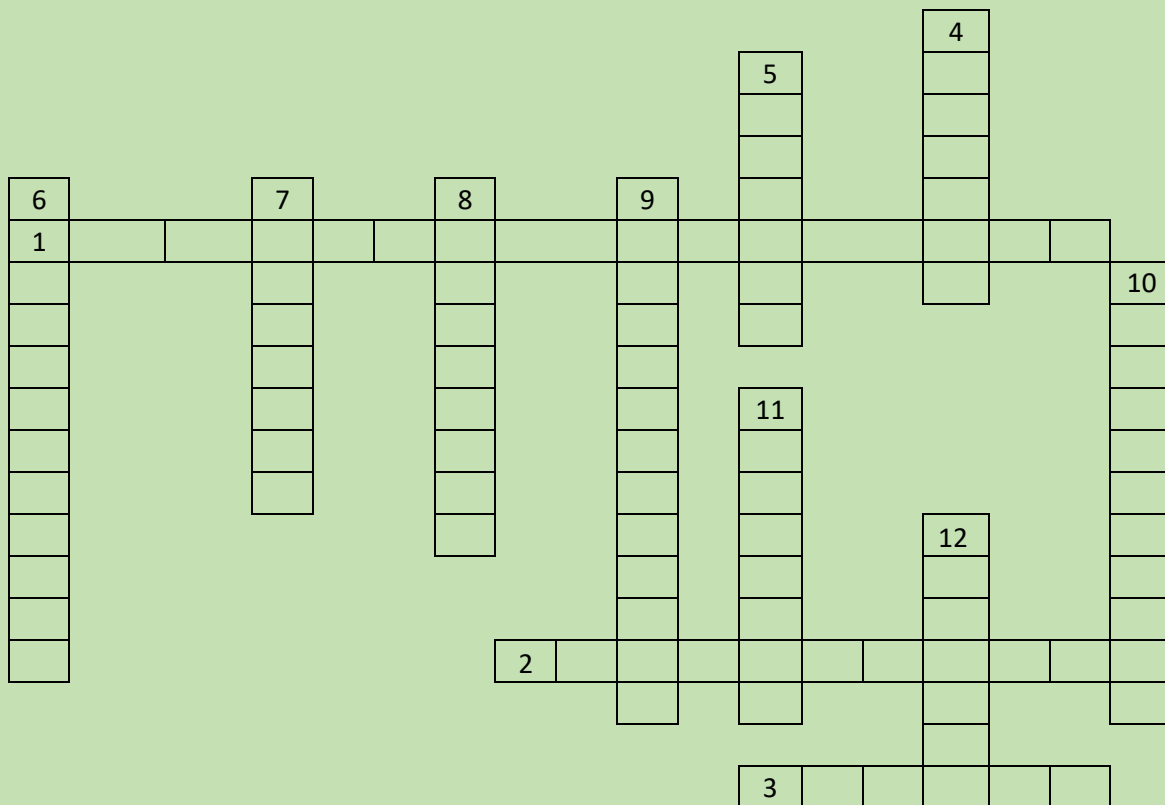
<p><b>START</b></p> $2x^{-2}y^{-5} =$	$(3x^2y^4)^{-2} =$	$2^{-4}x =$	$\frac{16^{-1}}{2^{-2}} =$
$\frac{2}{x^2y^5}$	$\frac{1}{9x^4y^8}$	$\frac{x}{16}$	
$2x^2y^5$	$\frac{x^4y^8}{9}$	$16x$	$8$
$\frac{6^3}{6^0} =$	$2^4x^{-9} =$	$\frac{1}{6x^{-1}y^4} =$	$1^{-12}x^{12} =$
$36$	$\frac{6x}{y^4}$	$6xy^4$	
$216$	$\frac{16}{v^9}$	$\frac{xy^4}{6}$	$x^{12}$
$\frac{10^{-3}}{10^{-5}} =$	$\frac{9^{-1}x^{-4}}{3^{-2}y^{-4}} =$	$(\sqrt[3]{xy})^{-3} =$	$\sqrt[3]{27}x^{-2} =$
$\frac{y^4}{x^4}$	$\frac{3x^4}{y^4}$	$xy$	
$100$	$\frac{x^4}{3y^4}$	$\frac{7}{x^2}$	$\frac{3}{r^2}$
$\frac{10^{-2}}{0.3^{-1}} =$	$9^0x^{-16} =$	$(\sqrt{7x})^{-2} =$	
$0.003$	$\frac{1}{x^{16}}$	$\frac{1}{7x^2}$	
			<p style="color: red; font-size: 1.2em;">Good Job!</p>  <p style="color: red; font-size: 1.2em;">The End</p>

# ADDING FRACTIONS WITH LIKE DENOMINATORS



## Subject – Science

*Solve the crossword puzzle given below with the help of the given clues.*



### Across:

1. *Ductless gland that secretes hormones (9, 6)*
2. *Period of life when the body undergoes changes leading to reproductive maturity (11).*
3. *Structure because of which voice becomes different in male and female (6)*

### Down

4. *Process of reproduction found in hydra (7)*
5. *Hormone secreted by pancreas (7)*
6. *Hormone secreted by testis (12)*
7. *Chemical substances secreted by endocrine glands (8)*
8. *Master gland in human body (9)*
9. *Fusion of a sperm with the egg (13)*
10. *Thread like structures present inside the cell nucleus. (11)*
11. *Hormone secreted by ovaries. (8)*
12. *Time when child's body starts turning into an adult body. (7)*

*Solve the following worksheet*

**a) Fill in the blanks:**

- i. Shape of a cell depends on the \_\_\_\_\_ it performs.
- ii. Human \_\_\_\_\_ cell are more than a metre long.
- iii. \_\_\_\_\_ occupies space between the cell membrane and nuclear membrane.
- iv. Ribosomes help in \_\_\_\_\_ synthesis.
- v. There are total \_\_\_\_\_ chromosomes in human beings.
- vi. Uterus is the organ where development of the \_\_\_\_\_ takes place.
- vii. Human male germ cell is \_\_\_\_\_ .
- viii. Ovum is produced by \_\_\_\_\_.

**b) Give one word answer for the following:**

- i. These are paired male reproductive organs \_\_\_\_\_.
- ii. A female sex hormone released by the ovary \_\_\_\_\_.
- iii. A cell which can prepare its own food. \_\_\_\_\_.
- iv. Delicate, outermost covering of the cell \_\_\_\_\_.
- v. Many cells combine to form it \_\_\_\_\_.

**c) State true or false for the following statements:**

- i. Cells arise from pre- existing cells.
- ii. WBCs can change their shape all the time.
- iii. Children grow fast by rapid increase in number of cells.
- iv. Non-living components are called cell organelles.
- v. Mitochondria are the power house of cells.

1. Complete practical file.

2. Make an assignment on topic plastic. Collect the information of all the plastic items used in your school and home. Identify their names and classify them as thermoset plastics and thermoplastic.

## **Subject – Social Studies**

### *Geography:*

1. *On the Map of India mark, locate and label the following: -*
  - a. *Types of soil .*
  - b. *Natural vegetation of India.*
  - c. *National parks and wildlife sanctuaries.*
  - d. *Distribution of coal, manganese, gold and bauxite across the country.*

### *History:*

2. *What were the terms and conditions of the subsidiary alliance?*
3. *Prepare a timeline for land settlement system of India during British rule.*

### *Civics*

1. a) *Write the qualification of members of Rajya Sabha, Lok Sabha.*
  - b) *Powers of speaker of Lok Sabha.*
  - c) *Power of Prime Minister.*

*Do on separate test note book,*

## **Subject – Art and Craft**

- *Prepare your activity/ model given by the art teachers with the help of videos.*
- *Topics are already allotted in the class.*
- *Follow the steps given in the video.*
- *Prepare the given project beautifully and for any query contact art teachers.*
- *Best Materials will be selected for exhibition.*

## **Subject – Computer Science**

1. *Learn and write Short cut Keys of MS Access on TNB.*
2. *Make a Power Point Presentation on any one topic and send on Email*

[sukhvinderkaur.dhillon@gmail.com](mailto:sukhvinderkaur.dhillon@gmail.com)

- *Computer Network*
- *Network Topology*
- *Communication Channel*

## **Subject – Art Integrated Project**

*Topic : Pollution*

*No. of days – 15*

*Dates 6<sup>th</sup> June to 20<sup>th</sup> June 2023*

### *Guidelines:*

1. *It is compulsory to submit the Art Integrated Project involving subjects English, Hindi, Maths, Science and S.St.*
2. *Use colourful assignment sheets of A4 size to complete the project.*
3. *Draft acknowledgment on the very first page of the project (page 1)*
4. *Make index on page no.2.*
5. *Make collage, paste pictures and draw diagrams, figures, pie charts, bar graph etc. by using pencil colours, sketches or any other medium of colours wherever required.*
6. *Search the material required from any source available and mention the source under bibliography on last page.*
7. *Punch all the assignment sheets and tag in a decorated file.*
8. *Write beautifully in neat and clean handwriting.*

<i>Subject order</i>	<i>No. of assignment sheets</i>
<i>Science</i>	<i>07</i>
<i>Mathematics</i>	<i>03</i>
<i>S. St</i>	<i>05 – 06</i>
<i>English</i>	<i>04</i>
<i>Hindi</i>	<i>02</i>



**Science : -**

- a) Introduction
- b) Types of pollution + Diagram
- c) Causes of Air pollution
- d) Prevention of air pollution
- e) Action taken by public to reduce it.
- f) Action taken by government to reduce it
- g) How it affects human health?

**Maths : -**

1. Give definition of primary pollutants on single line assignment sheet.
2. Draw a pie chart of primary pollutants. (on plain side 1)
3. Write about the primary pollutants from where they are coming (on single line assignment sheet 2)
4. Draw a bar graph of source of primary pollutants.

**Social Studies: - Thermal pollution**

- a) What is thermal pollution?
- b) What are the causes of thermal pollution?
- c) On the map of India, mark and locate the thermal power plant station.
- d) What are the steps taken by the central Govt. to control thermal pollution?
- e) Name any two diseases caused by thermal pollution and what are its remedies?

**English:**

Write an article on 'Pollution' in near about 400 words and also paste relevant pictures.

**Hindi:**

1. किसी समाचार पत्र के संपादक को प्रदूषण की समस्या पर चिंता व्यक्त करते हुए पत्र लिखिए ।
2. विषय वस्तु विषय अनुसार होनी चाहिए ।
  - i. क्षेत्र का वर्णन
  - ii. समस्या का वर्णन (कौन – कौन सी समस्या है)
  - iii. समस्या के लिए सुझाव
  - iv. कार्यवाही की तरफ ध्यान देना
  - v. समापन धन्यवाद सहित