

SRI GURU HARKRISHAN PUBLIC SCHOOL, DUGRI ROAD, LDH

SUMMER BREAK ASSIGNMENTS (2025-26)

CLASS VIII



Dear Parents

Greetings !!!

As already intimated, the Summer Break is scheduled from **2nd June 2025 till 5th July 2025**. Summer Vacation has always been considered to be the most desirable period looked forward by children; when they can go beyond academics and embark on a journey of fun and adventure by reading books, exercising, meditating, and channelizing one's energy in a positive manner.

The Summer Break Assignments are designed in such a way that the students will learn by doing. The parents are requested to help the students in completing all the Assignments in a neat and clean handwriting. These assignments carry weightage so it is important for everyone to deposit them immediately after the Summer Break gets over.

We wish everyone a wonderful and well deserved Summer Break! May it be filled with relaxation, fun and creating cherished memories.

HAPPY SUMMER BREAK !!!



Regards  
Principal

## Summer Holidays Homework

### Science (Grade- 8)

#### 1. Task: Science in the Kitchen"Mini-Project".

**Activity:** Explore the Science behind cooking processes-

e.g. (a) Why does baking soda make cakes fluffy?

(b) What happens when milk curdles?

**Submission :** Present the formation of cake and curdling of milk in a report or a cooking show style video.

**Outcome:** Shows real-life chemistry and biology in everyday activities.

#### 2. Task: "Color in Motion: The Art of Light dispersion".

**Activity / Model :** (a) Create a Model or diorama based on Physics Concept i.e.

**Dispersion of Light.**

(b) Design a creative model of **Newton' s color wheel**.

**Requirements:** circular cardboard disc , color segments, a motor and white background.

**For Reference:** <https://youtu.be/mjUyKiTalJQ?si=g8DCiU85mYZECTAq>

**Outcome:** The color wheel demonstrate additive color mixing while Dispersion of light describe about splitting of a white light into seven colors.

#### 3. Be an Experimentor

Dear students, Prepare 3-D model on topic as assigned you according to your **Roll nos**. The links also shared below the topic , you can take help from the links.

**Task : (i)** Design your own working "**ELECTROSCOPE**" at home. **(Roll no. 1 to 6)**

**For Reference:** <https://youtu.be/wPkL5vFzW-I?feature=shared>.

**(ii)** Make a 3-D model of "**KALEIDOSCOPE**". **(Roll no. 7 to 12)**

**For Reference:** <https://youtube.com/shorts/0q7UM5i2S9c?si=7WdZJiMTqHotl9Y3>.

**(iii)** Prepare a 3- D Model of "**MICROORGANISMS**". **(Roll no. 13 to 18)**

**For Reference:** <https://youtube.com/shorts/TL0OUJfYAng?si=rcijpzHKNFGGHmPd>

(iv) Make a 3-D "Solar Powered house Project". (Roll no.19 to 24)

**For Reference:** [https://youtu.be/UH1I5Yz6IXo?si=QEfK9M0j\\_mXCP6Mb](https://youtu.be/UH1I5Yz6IXo?si=QEfK9M0j_mXCP6Mb).

(v) Prepare a 3-D model of "Water Level Indicator". (Roll no. 25 to 30)

**For Reference:** <https://youtu.be/0RcdS9sma5s?si=krbhvfxUSNJcaulR>.

(vi) Create a 3-D "Earthquake detector Model". (Roll no. 31 to 35).

**For Reference:** [https://youtu.be/JcJqyN5Gqc0?si=luRsx7vCsKbk\\_CVO](https://youtu.be/JcJqyN5Gqc0?si=luRsx7vCsKbk_CVO).

**Submission:** "Students, kindly note model should be of appropriate size and best ones will receive recognition for their outstanding creativity and efforts"!

**Outcomes:** More conceptual clarity enables visualization of abstract concepts and develop practical skills such as a wiring and assembling the components.

**4. Vaccinology:** Most vaccines are given to people when they are infants however sometimes vaccines are given to adults as well. why is that vaccines are administered mainly to infants?

**Task/ Activity :** Prepare a list of vaccines as well as diseases from which your were protected in your childhood (you can take the help of your parents).

**Submission:** Activity should be done on A-4 size coloured sheet.

**Outcome:** Learners will be able to differentiate vaccines and antibiotics.

### 5. Plant pathology:

**Task :** Visit a nearby garden or a plant nursery . Collect the information about plant diseases caused by microorganisms and Click the pictures of plants that are suffered from diseases .

**Submission :** Paste the pictures on a memory book ( scrap book).

Write the information in specific order:(a) Name of the plant

(b) Name of disease

(c) Name of disease causing microorganism

(d) Preventive measures

**Outcome:** learners will be able to know about the harms of microorganisms.

### 6. Task: Project work / Activity

Most package to food items have expiry dates on them it is the best to consume these before the given expiry date so check the packets of different 5 products in your home and complete the following table.

S.No.	Product Name	Expiry Date	Method of packaging
1.			
2.			
3.			
4.			
5.			

**Submission:** It should be done on scrap book.

**Outcomes:** Enhance analytical and Research skills.

**7. Task:** Do an experimental survey to know about plant growth and its development.

- Grow a potted plant of same species in five different pots.
- To check the growth of plant , it is nourished in different conditions in 5 different pots which are as follows:

First plant	Second plant	Third Plant	Fourth Plant	Fifth plant
<ul style="list-style-type: none"> <li>• Will get all the resources (Water , soil, sunlight and carbondioxide)</li> </ul>	<ul style="list-style-type: none"> <li>• Will get no water.</li> <li>• but carbondioxide, soil and sunlight will be given.</li> </ul>	<ul style="list-style-type: none"> <li>• Will get no carbondioxide.</li> <li>• water , soil and sunlight will be given .</li> </ul>	<ul style="list-style-type: none"> <li>• Will get no soil.</li> <li>• carbondioxide, water and sunlight will be given.</li> </ul>	<ul style="list-style-type: none"> <li>• Will get no sunlight.</li> <li>• Soil, carbondioxide, water , will be given.</li> </ul>

**For Reference :** <https://youtu.be/tXptM5HPm-Y?si=vRsghxwr5zTKJ2eD>.

**Outcomes:** learners will be able to understand that plants require all resources like water, carbondioxide, soil and sunlight for their growth and develop critical thinking.

# WORKSHEET

## Subject - Science

### Q.1. Define these terms:

a) Myopia   b) Angle of reflection   c) Retina   d) Diffused reflection   e) Refraction

**Q.2. Fill in the blanks:** a) When the mirrors are inclined at  $90^\circ$ , we get \_\_\_\_\_ images.

b) In bright light, the size of pupil \_\_\_\_\_.

c) The space between the cornea and lens is filled with a liquid called \_\_\_\_\_.

d) Braille system was invented by \_\_\_\_\_.

e) Kaleidoscope is based on the concepts of \_\_\_\_\_.

### Q.3. Answer in one word:

a) Which element is used at the back of plane mirror?

b) The distance between the object and its image formed by a plane mirror appears to be 18 cm. What is the distance between mirror and the object?

c) Name a device which works on the principle of multiple reflection.

d) What do we call the image that cannot be obtained on a screen?

e) Name the scientist who studied that if a white light is passed through a prism, it splits into different colours.

### Q.4. Multiple choice questions:

a) We are able to see an object due to the presence of

(i) light   (ii) dark   (iii) refraction.   (iv) object

b) The bouncing back of light into the same medium is called

(i) refraction   (ii) reflection   (iii) dispersion   (iv) diffraction

c) A mirror has \_\_\_\_\_ surface.

(i) rough   (ii) polished   (iii) dark   (iv) all of these

d) Maximum part of light is reflected by

(i) opaque object   (ii) translucent object   (iii) transparent object   (iv) all of these

e) Beam of light striking the reflecting surface is called

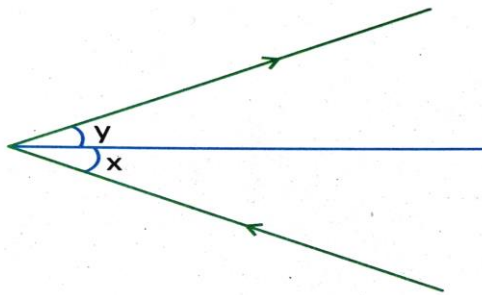
(i) incident ray. (ii) reflected ray (iii) refracted ray (iv) normal ray

**Q.5. Answer the following questions:**

a) How can you take care of your eyes? Explain.

b) Why are tall mirrors placed in a small offices?

c) Draw figure showing the position of plane mirror. Also , label the angle of incidence and reflection on it.



d) Why cannot you see your surroundings clearly as you enter a darkened cinema hall?

e) Differentiate between regular and diffused reflection.

## Grade – 8

### Holidays Homework

#### ENGLISH

\*Maintain a notebook to paste at least five printed newspaper articles, and for each one, write a short overview of the main idea you get from that particular article.

\*Prepare a Bio-Sketch of S. Bhagat Singh, our greatest freedom fighter. Search related information from the sources you wish to, like- books related to Bhagat Singh, watch movies related to Bhagat Singh or search on google.

\*Draw/paste 5 pictures of your favorite things and write at least five sentences about them using determiners specially.

#### Assignment for practice

1. Fill in the blanks with suitable determiners..

- a. I saw \_\_\_\_\_ interesting bird in the garden (a, an, the)
- b. Could you please pass me \_\_\_\_\_ salt? (a, an, the)
- c. They spend \_\_\_\_\_ summer in the mountains .(a, an, the)
- d. He ate \_\_\_\_\_ apple for breakfast. (a, an, thee)
- e. \_\_\_\_\_ students in the class are intelligent. (all, some, every)
- f. I don't have \_\_\_\_\_ money left (any, some, many)
- g. He has \_\_\_\_\_ close friends (little, a little, the little)
- h. Whose book is \_\_\_\_\_ ? (this, that, these)
- i. \_\_\_\_\_ kind of music do you enjoy? (what, which, whose)
- j. \_\_\_\_\_ are my favorite shoes. (these, this, that)
- k. \_\_\_\_\_ flowers are blooming beautifully (these, this, those)
- l. I like \_\_\_\_\_ colour of your dress (that, this, those)
- m. \_\_\_\_\_ child needs love and attention (each, every, both)

2. Complete the following sentences using appropriate relative pronouns given within the backers.

- a. I have admitted the man (which/who/whom/whose) was lying injured on the road.



b. I want to read all those books (that/which/who/whose) have been recommended for the Janpath award for the year 2015.

c. (Which/what) is the new e-mail identity of your school?

d. To (who/whom) did you give my pen?

e. (Who/which/whose) is your favorite colour?

3. Rewrite the following paragraph by replacing repeated nouns with appropriate pronouns whenever it is necessary.

The cat sat on the windowsill. The cat watched the birds in the garden. The cat i tail twitched with interest. Suddenly, a butterfly fluttered close to the cat. The cat pounced, hoping to catch the butterfly. The cat missed the butterfly, and the butterfly flew away.



## CLASS VIII

## SUBJECT SOCIAL SCIENCE

### GENERAL INSTRUCTION:

- Showcase your creativity and originality in your vacation work and model making.
- Complete your vacation assignment in Scrap Book or A4 size plain colourful sheets.

**TASK 1** Write and fill India's states, Union territories and their capitals on India Political Map

**TASK 2** Select any two states of India and compare them with Punjab on the basis of area, population, vegetation, culture, occupation, traditional food, traditional dress and famous historical monuments and buildings.

**TASK 3** To learn and know about the people behind the Indian National Movement and Freedom (Mahatma Gandhi, Rani Laxmibai, Subhash Chandra Bose, Bahadur Shah Zafar) Write about their contribution in Freedom in about **200-250** words

**TASK 4** Write in **200-250** words on the following given topics

Sati System

Child Labour

Fundamental Rights

Article 17 and 21

### **TASK 5 MODEL MAKING**

**ROLL NO, 1-12** A visual representation of different forms of government (Democracy and Monarchy) with brief explanation.

**ROLL NO. 13-24** A visually engaging timeline with pictures and brief descriptions of major historical events of Indian Freedom Struggle)

**ROLL NO. 25-36** Natural Resources and its conservation

**HOLIDAY HOMEWORK**  
**CLASS-8 SUBJECT - MATHS**

**Project work**

To compare the cost of different articles in different marts

Visit at least two or three departmental stores or Marts note the rate/cost of different articles and compare the price between stores and then prepare the table. Make a graph for same

**Activity 1:-** prepare a dictionary of 25 keywords with their meaning from the following chapters

**Activity 2:-** Write squares of 1-30 on A4 size chart

**Activity 3:-** Write cubes of 1-30 on A4 size chart

And Prepare table mats of these by writing on both sides of the charts

**Lab Manual Activity (Done in lab manual )**

Activity 1 - Understanding Quadrilaterals

Activity 2 - Understanding Quadrilaterals

Activity 3 - Understanding Quadrilaterals

Activity 4 - Understanding Quadrilaterals

Activity 5 - Understanding Quadrilaterals

Activity 6 - Data Handling

Activity 7 - Data Handling

Chapter 1. Rational numbers

Chapter 2. Equation in one variable

Chapter 3. Understanding quadrilaterals

Write the key words in scrap book The cover of scrapbook should be designed using geometrical shapes

**CHAPTER - 1:**

1. Select the rational numbers from the list which are also the integers:

$9/4, 8/4, 7/4, 6/4, 9/3, 8/3, 7/3, 6/3, 5/2, 4/2, 3/1, 3/2, 1/1, 0/1, -1/1, -2/1, -3/2, -4/2, -5/2, -6/2$ .

2. Verify the property  $x \times (y + z) = x \times y + x \times z$  of rational numbers by taking.

$$X = -\frac{1}{2} \quad y = \frac{3}{4} \quad \& \quad z = \frac{1}{4}.$$

3. A train travels  $144\frac{5}{2}$  km in  $17\frac{1}{2}$  hours. Find the speed of the train in Km/h.

4. Arrange the numbers  $1/4, 13/16, 8/5$  in the descending order.

5. Find 10 rational numbers between  $1/5$  and  $2$ .

6. Find the product of additive inverse and multiplicative inverse of  $-1/3$ .

7. Does  $5/10$  lie between  $1/2$  and  $1$ .

8. Write the rational number  $10.11$  in the form  $p/q$  format.

9. Explain the statement with examples - "all the integers are rational numbers, but not all rational numbers are integers".

10. Show the positions of these numbers on different Number lines - a)  $5/7$ . b)  $12/19$  c)  $-13/9$

## CHAPTER - 2:

11. Solve the following:

a).  $8x = 20 + 3x$

b).  $3x + 5/2x + 1 = 1/3$

c).  $x + 6/4 + x - 3/5 = 5x - 4/8$

d).  $2x/3 + 1 = 7x/15 + 3$

e).  $5x + 7/2 = 3/2x - 14$

f).  $x = 4/5(x + 10)$

12. The sum of two numbers is 95. If one number exceeds the other by 15, find the numbers.

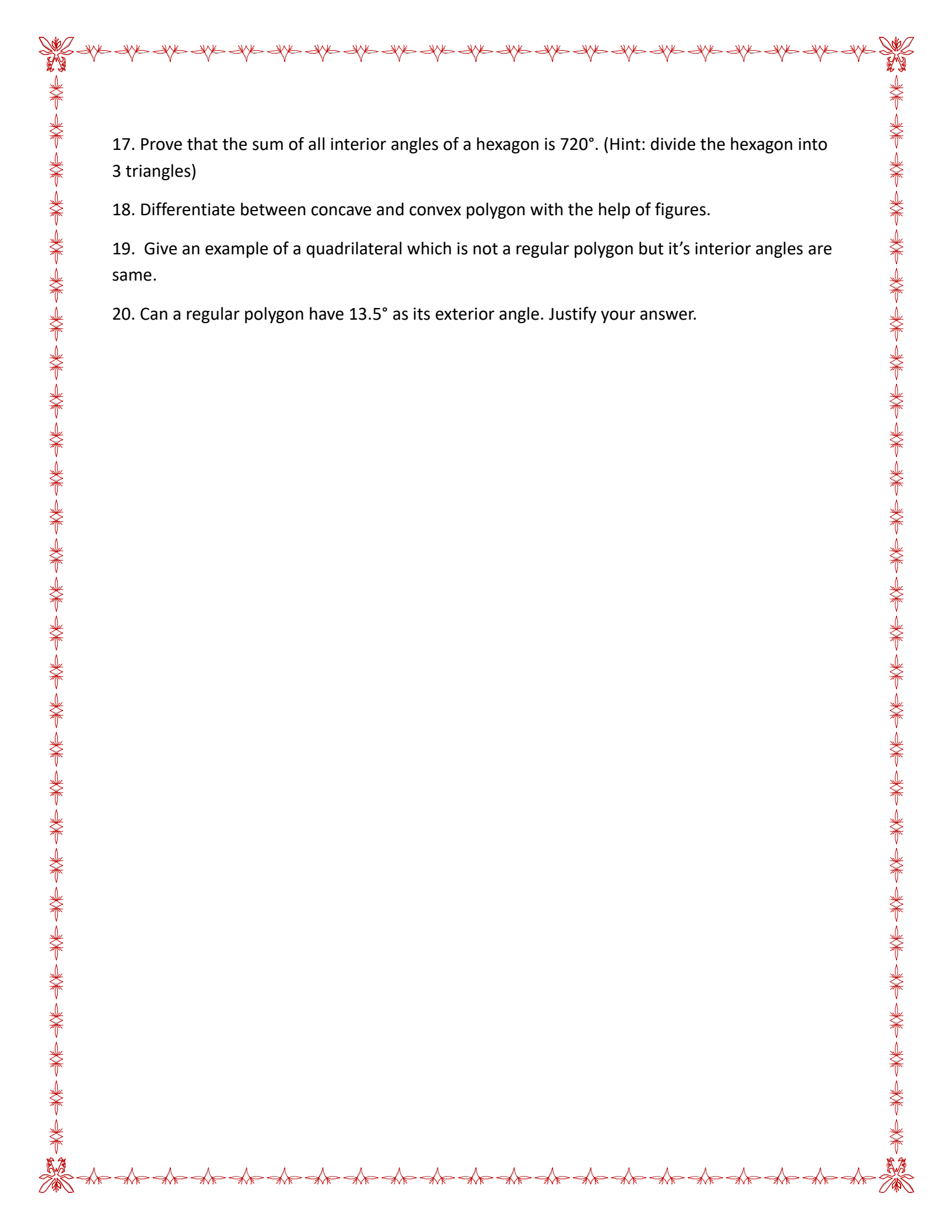
13. I have a total of Rs 300 in coins of denominations Rs 1, Rs 2 and Rs 5. The number of Rs.2 coins is three times the number of Rs 5 coins. The total number of coins is 160. How many coins of each denomination are with me?

14. Solve:  $5x - 2(2x - 7) = 2(3x - 1) + 7/2$

15. The perimeter of a rectangular pool is 154m. Its length is 2m more than twice its breadth. What are the length and breadth of the pool?

## CHAPTER - 3 :

16. What are the values of the interior and exterior angles of a regular polygon with 47 sides?



17. Prove that the sum of all interior angles of a hexagon is  $720^\circ$ . (Hint: divide the hexagon into 3 triangles)

18. Differentiate between concave and convex polygon with the help of figures.

19. Give an example of a quadrilateral which is not a regular polygon but its interior angles are same.

20. Can a regular polygon have  $13.5^\circ$  as its exterior angle. Justify your answer.

## Holidays Homework

### कक्षा- आठवीं

1. अगर मैं एक दिन के लिए सुपरहीरो बन जाऊँ तो ..... विषय पर एक रोचक कहानी लिखें। चित्र भी बनाएँ।
2. 'प्रकृति' अथवा 'मेरा सपना' अथवा 'मित्रता' जैसे किसी विषय पर कविता लिखें। कविता को रंग-बिरंगे चित्रों से एक सुंदर पृष्ठ (पेज) पर प्रस्तुत करें।
3. किसी निर्जीव वस्तु (non living thing) जैसे पुराना बस्ता, पुरानी किताब या घड़ी की आत्मकथा लिखें। हास्य) शैली में।
4. पाठ 2- और 3 में से विशेषण और संज्ञा शब्दों को चुन कर लिखें। (10-10) (स्कैपबुक में)

## HOLIDAYS HOMEWORK

ਜਮਾਤ - ਅੱਠਵੀ

ਵਿਸ਼ਾ- ਪੰਜਾਬੀ

1. ਬਾਬਾ ਫਰੀਦ ਜੀ ਦੇ ਸਲੋਕ ਲਿਖ ਕੇ ਸੁੰਦਰ ਚਾਰਟ ਤਿਆਰ ਕਰੋ।
2. ਆਪਣੇ ਦੇਸਤ ਮਿੱਤਰ ਦੇ ਚੰਗੇ ਗੁਣਾਂ ਤੇ ਪੰਜ ਸਤਰਾਂ ਲਿਖੋ।
3. ਸ੍ਰੀ ਕ੍ਰਿਸ਼ਨ ਜੀ ਤੇ ਸੁਦਾਮੇ ਦੀ ਸੱਚੀ ਦੇਸਤੀ ਬਾਰੇ ਸਤਰਾਂ ਲਿਖੋ।
4. ਪੰਜਾਬ ਖੇਤੀਬਾੜੀ ਯੂਨੀਵਰਸਿਟੀ ਲੁਧਿਆਣਾ ਦੀ ਯਾਤਰਾ ਕਰਕੇ ਉਸ ਬਾਰੇ 10 ਸਤਰਾਂ ਲਿਖੋ।
5. ਪੰਜਾਬੀਆਂ ਨੂੰ ਕਿਸ ਗੱਲ ਲਈ ਮਾਣ ਹੋਣਾ ਚਾਹੀਦਾ ਹੈ ਤਾਂ ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦਾ ਦੇਸ਼ਾਂ ਅਨੁਸਾਰ ਦਰਜਾ ਦੱਸੋ।