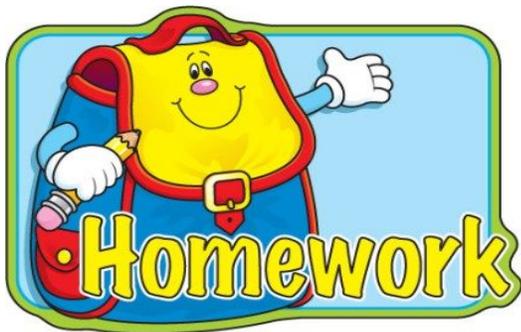




**Kulachi Hansraj Model School**

**Holidays Homework, Class VII**  
**Session: 2018-19**



**‘Holiday Homework’ is an attempt to channelize the creative energy of the children. Doing it in the right spirit with enthusiasm will make it a great learning experience. Make sure that your work is neat, presentable and original. Adhere to the guidelines.**

**THINGS TO REMEMBER:**

- **Always start your day with prayers.**
- **Wake up on time and go to park. Play and observe the beauty of nature.**
- **Help your parents at home and spend time with family.**
- **Read storybooks, newspaper and children’s magazine.**
- **Use your time constructively and pursue your hobbies in leisure time.**
- **Manage your work properly. Make a time-table of the daily activities and follow the same.**
- **Revise all the work that has been done in class.**
- **Finish your holidays homework well in advance.**
- **Travel and explore places as it widens the horizons of your mind.**
- **Try to converse in English with your parents and everyone else because the best way to learn a language is to use it.**

Subject	Task
Mathematics	<p><b>Do the following worksheets in a separate notebook. The notebook will be assessed in the I term.</b> <b>(10 marks)</b></p> <p><b>Practice Worksheet 1</b></p> <p>1) Represent the following rational numbers on the number line: a) <math>-3/4</math> b) <math>31/-6</math> c) <math>-1/2</math> d) <math>3/4</math></p> <p>2) Write the following rational numbers in the standard form: a) <math>5/15</math> b) <math>-24/40</math> c) <math>33/-77</math> d) <math>-45/-105</math></p> <p>3) Compare the following rational numbers: 1) <math>-9/27</math>, <math>6/-18</math>      2) <math>-5/7</math>, <math>10/-6</math> 3) <math>3/-8</math>, <math>-15/40</math>      4) <math>-11/7</math>, <math>33/21</math></p> <p>4) Arrange the following rational numbers in the descending order: 1) <math>2/-3</math>, <math>-4/9</math>, <math>-5/12</math>, <math>7/-18</math> 2) <math>3/-4</math>, <math>-5/12</math>, <math>-7/16</math>, <math>9/-24</math></p> <p>5) Arrange the following rational numbers in the ascending order: 1) <math>2/5</math>, <math>1/3</math>, <math>3/4</math>, <math>1/6</math>    2) <math>5/6</math>, <math>7/8</math>, <math>11/12</math>, <math>3/10</math></p> <p>6) Fill in the blanks by the correct symbol <math>&gt;</math>, <math>=</math> or <math>&lt;</math> : 1) <math>  3/4  </math> ----- <math>  1/2  </math>    2) <math>  -1/2  </math> ----- <math>  -3/4  </math></p> <p>7) Add: 1) <math>3/7</math> and <math>-9/7</math>      2) <math>5/9</math> and <math>7/-9</math>      3) <math>2/5</math>, <math>5/-9</math> and <math>-6/15</math></p> <p>8) Simplify: 1) <math>-2 + ( 3 / 8 ) + ( - 1 / 5 )</math> , 2) <math>(2/3) + ( -7/11) + (-1/4 )</math></p> <p>9) Verify that <math>a + b = b + a</math> by taking (1) <math>a = -7/5</math>, <math>b = 2/7</math>      (2) <math>a = -1</math> , <math>b = -2/3</math></p> <p>10) Verify that <math>(a+b)+c=a+(b+c)</math> by taking (1) <math>a = -2</math> , <math>b = -2/3</math> , <math>c = -3/4</math> (2) <math>a = -12</math>, <math>b = -9/11</math>, <math>c = 7/-12</math></p>

11) Simplify the following:

1)  $(\frac{2}{3}) + (-\frac{4}{5}) + 1 + (-\frac{2}{3}) + (-\frac{11}{5})$

2)  $(\frac{5}{8}) + (-\frac{8}{9}) + 0 + (-\frac{13}{3}) + (\frac{17}{24})$

12) Subtract : 1)  $(-\frac{3}{4})$  from  $(\frac{1}{2})$  2)  $(\frac{5}{8})$  from  $(-\frac{3}{14})$

13) What should be added to  $(-\frac{7}{20})$  to get  $(-\frac{2}{5})$ ?

14) The sum of two rational numbers is  $(-\frac{3}{7})$ . If one of the number is  $(-\frac{5}{8})$  find the other.

15) The sum of two rational numbers is  $(-\frac{5}{8})$ . If one of the number is  $(-\frac{6}{11})$ , find the other number.

16) To which number should  $(\frac{2}{3})$  be added to give  $(-\frac{11}{4})$ ?

17) From which number should  $(-\frac{11}{4})$  be subtracted to give  $(-\frac{11}{4})$ ?

18) Find the product of :

1)  $\frac{5}{9}, -\frac{2}{5}$  2)  $-5, -\frac{3}{15}$

19) Multiply, and give the product in the standard form:

1)  $-\frac{6}{25}$  by  $\frac{50}{24}$  2)  $\frac{3}{11}$  by  $22$

3)  $\frac{21}{5}$  by  $-\frac{15}{21}$  4)  $-36$  by  $-\frac{5}{9}$

20) Verify the property  $a \times b = b \times a$  by taking :

1)  $a = (-\frac{12}{7}), b = (-\frac{21}{5})$  2)  $a = 0, b = (-\frac{13}{3})$

21) Verify the property  $a \times (b \times c) = (a \times b) \times c$  by taking

1)  $a = (\frac{7}{5}), b = (-\frac{9}{4}), c = (\frac{1}{2})$

2)  $a = 1, b = (-\frac{13}{5}), c = (\frac{3}{5})$

22) Verify the property  $ax(b+c)=(axb)+(axc)$  by taking:

1)  $a = (\frac{1}{3}), b = 0, c = (-\frac{7}{6})$

2)  $a = -2, b = (\frac{9}{5}), c = (-\frac{2}{15})$

23) Verify  $(x \times y)^{-1} = x^{-1} \times y^{-1}$

1)  $x = 1/2, y = 1/3$     2)  $x = -3/4, y = -1/8$

24) Verify that  $|x + y| \leq |x| + |y|$  by taking  $x = 13/4$  and  $y = 3/2$

25) Verify that  $|x + y| = |x| + |y|$  by taking  $x = 1/2$  and  $y = -1/4$

26) The product of two rational numbers is 6. If one of them is 8, find the other number.

27) By what number should  $(-6/11)$  be multiplied to get  $(-32/11)$ ?

28) Find the rational number between:

1) 3 and 4    2) -7 and -6

29) Find three rational numbers between:

1) -5 and 8    2)  $(-1/3)$  and  $(1/2)$

30) State whether true or false: (practice worksheet on rational numbers)

1) Absolute value of a rational number is either positive or 0.

2) There are countless rational numbers with absolute value less than 5.

3) The absolute value of 0 is 0.

### **Practice Worksheet 2**

**Solve the following word problems on rational numbers.**

1. From a rope 11 m long, two pieces of lengths  $13/5$  m and  $33/10$  m are cut off. What is the length of the remaining rope?

2. A drum full of rice weighs  $241/6$  kg. If the empty drum weighs  $55/4$  kg, find the weight of rice in the drum.

3. A basket contains three types of fruits weighing  $58/3$  kg in all. If  $73/9$  kg of these be apples,  $19/6$  kg be oranges and the rest pears. What is the weight of the pears in the basket?

4. On one day a rickshaw puller earned Rs.80. Out of his earnings he spent \$Rs. $68/5$  on tea and snacks, Rs. $51/2$  on food and Rs. $22/5$  on repairs of the

rickshaw. How much did he save on that day?

5. Find the cost of  $17\frac{1}{5}$  meters of cloth at Rs.  $147\frac{1}{4}$  per meter.

6. A car is moving at an average speed of  $202\frac{1}{5}$  km/hr. How much distance will it cover in  $15\frac{1}{2}$  hours?

7. Find the area of a rectangular park which is  $183\frac{1}{5}$  m long and  $50\frac{1}{3}$  m broad.

8. Find the area of a square plot of land whose each side measures  $17\frac{1}{2}$  meters.

9. One liter of petrol costs Rs.  $187\frac{1}{4}$ . What is the cost of 35 liters of petrol?

10. An airplane covers 1020 km in an hour. How much distance will it cover in  $25\frac{1}{6}$  hours?

11. The cost of  $7\frac{1}{2}$  meters of cloth is Rs.  $231\frac{1}{4}$ . What is the cost of one meter of cloth?

12. A cord of length  $143\frac{1}{2}$  m has been cut into 26 pieces of equal length. What is the length of each piece?

13. The area of a room is  $261\frac{1}{4}$  m. If its breadth is  $87\frac{1}{16}$  meters, what is its length?

14. The product of two rational numbers is  $48\frac{1}{5}$ . If one of the rational number is  $66\frac{1}{7}$ , find the other rational number.

15. Rita had Rs.300. She spent  $\frac{1}{3}$  of her money on notebooks and  $\frac{1}{4}$  of the remainder on stationery items. How much money is left with her?

16. Adrian earns \$16000 per month. He spends  $\frac{1}{4}$  of his income on food;  $\frac{3}{10}$  of the remainder on house rent and  $\frac{5}{21}$  of the remainder on the education of children. How much money is still left with him?

**Practice assignment**

Do the assignments of chapter **Rational numbers and Operations on Rational numbers** from Academic Support in assignment register as a Holidays Homework.

**Learning Work**

Learn tables from 2 to 20

Learn squares of 2 to 30

**Project Work (10 marks)**

1. Complete the following table.

Term	Meaning/Definition	Example	Non example
symmetry			
No symmetry			

2. Collect 5 objects from nature or your surrounding displaying line of symmetry Complete the following table.

Object	Shape	No. of lines of symmetry	No. of horizontal lines of symmetry	No. of vertical lines of symmetry

3. Maths activity file work

Write 2 alphabets and 2 digits from 1 to 10 having 2 lines of symmetry in your activity file

( only 2 alphabets on one sheet and 2 digits on other page)

	<p>Also create 3 symmetrical patterns/designs using  1) Thread painting 2) Drawing 3) paper cutting  Paste it in the activity file.</p> <p><b>Useful weblinks</b>  <a href="https://m.youtube.com/watch?v=zjON9aEuAxQ">https://m.youtube.com/watch?v=zjON9aEuAxQ</a>  <a href="https://m.youtube.com/watch?v=orZly5lIXhc">https://m.youtube.com/watch?v=orZly5lIXhc</a></p> <p>(The above links help you to understand how to make the above models and for other models, videos are available on youtube)</p>
<p><b>English</b></p>	<p>a) <b>PROJECT:</b> Prepare a <b>‘Wall Magazine’</b> on the topic ‘Different Professions’. You may take help of the first unit of your English Reader, ‘People at Work’. Choose any shape and size of your magazine, present as many professions as you wish to, paste pictures, write about various professions, make it colourful and exhibit your creativity in the best possible manner. You may use any sheet(s) of any colour, make it on a cartridge sheet, ivory sheet etc. The project carries <b>ten marks</b>. Keep in mind the following <b>rubrics</b>:</p> <ul style="list-style-type: none"> <li>● Content: 3 Marks</li> <li>● Presentation: 3 Marks</li> <li>● Originality: 2 Marks</li> <li>● Creativity: 2 Marks</li> </ul> <p>b) <b>‘Reading soothes the mind’.</b>  Read to your heart’s content. <b>Review one book</b> of your choice in the form of a Microsoft Word Document. (Maximum two to three pages). Use your creativity. Add pictures, animation etc., and write the review keeping in mind the following points:  Name of book, writer, genre, characters, brief summary, favourite character, what you liked about the book, rating etc. This task carries <b>ten marks</b>.</p> <p>c) Hone your grammatical skills by practising the worksheets (<b>Number: 1,2,3,5 and 6</b>) given in your <b>‘English Practice Book’</b> which covers all the important concepts of grammar. Use pencil while writing in the book. The</p>

	<p>answers would be discussed in the class, in groups, after the summer break.</p> <p>d) Practice 'Reading Comprehension' and 'Integrated Grammar' exercises from the '<b>Academic Support Material</b>'. Also, attempt worksheets from <b>Literature</b> chapters done till now.</p> <p><b>NOTE:</b></p> <p>*Students would present their wall magazines in the class as per dates that their respective English teachers would give.</p> <p>*Mail your word file of 'Book Review' to your respective English teachers with your name, class/section and roll number in the subject line of mail. You may refer to the following:</p> <ul style="list-style-type: none"> <li>● Ms. Gunpreet Kaur - <a href="mailto:khmsgunpreet@gmail.com">khmsgunpreet@gmail.com</a></li> <li>● Ms. Charu Thukral - <a href="mailto:savicharu@gmail.com">savicharu@gmail.com</a></li> <li>● Ms. Princi Girotra - <a href="mailto:princi.girotra89@gmail.com">princi.girotra89@gmail.com</a></li> <li>● Ms. Renu Sharma - <a href="mailto:renusharma2711@gmail.com">renusharma2711@gmail.com</a></li> <li>● Ms. Anjana Taneja - <a href="mailto:antan27@gmail.com">antan27@gmail.com</a></li> </ul> <p>*English Practice Book would be discussed in class in the month of July, covering few worksheets at a time, every week.</p>
<p><b>Hindi</b></p>	<p><b>अनुच्छेद लेखन- (10 अंक)</b></p> <ul style="list-style-type: none"> <li>● नदियों में प्रदूषण की समस्या</li> <li>● हमारे राष्ट्रीय पर्व</li> </ul> <p><b>परियोजना कार्य- (10 अंक)</b></p> <p>ऋतु चक्र पर परियोजना बनाएं मुख्य बिंदु</p> <p>1- छह ऋतु की प्राकृतिक विशेषताएं (2)</p> <p>2- पहनावा (2)</p> <p>3 खानपान (2)</p> <p>4 रितुओं का सांस्कृतिक पक्ष- त्योहार (2)</p> <p>5 ग्रीष्म ऋतु में अपनाई जाने वाली सावधानियां (2)</p>
<p><b>Social Science</b></p>	<p style="text-align: center;"><b>THEME- WATER SCARCITY AND CONSERVATION</b></p> <p><b>A) PROJECT (10 MARKS)</b></p>

Prepare an integrated project on water scarcity and conservation. Your project should include the following:

- a) Definition of water scarcity and depletion
- b) Five reasons of ground-water depletion.
- c) Measures taken by our Government to solve this problem.
- d) Steps that you can take at the individual level to help solve the problem.

**Rubrics:**

Content: (3)

Creativity: (3)

Presentation: (2)

Timely submission: (2)

**B) CASE STUDY (5 MARKS)**

Read the article on water depletion and answer the questions that follow:

**Is Bengaluru about to run dry?**

To say this is probably alarmist, but the death of the city's lakes and depletion of its groundwater as a result of thoughtless development is undeniable.



A BBC report listed 11 world cities that were “most likely to run out of drinking water”, and put Bengaluru at number 2, behind only São Paulo, Brazil. The report mentioned the acute shortage of water in Cape Town in South Africa, where people are now being rationed 50 litres daily, and which many fear could become the first major city to run dry in the modern era. Other cities on the list of the most vulnerable were Beijing, Cairo, Jakarta, Moscow, Istanbul, Mexico City, London, Tokyo and Miami.

The report noted that more than half of Bengaluru's drinking water is wasted due to “antiquated plumbing”, 85% of the city's lakes “had water

that could only be used for irrigation and industrial cooling”, and “not a single lake had suitable water for drinking or bathing”.  
The Bangalore Water Supply and Sewerage Board (BWSSB) — the state agency managing water supply and sewage disposal — was quick to respond. It suggested that the report was alarmist, was based on old data, and was “far from the factual situation”.

Bengaluru originally had multiple sources of water supply in the form of over 200 lakes, abundant groundwater, and supplies from reservoirs and tanks in the Arkavathi river basin — the Hesaraghatta Lake in the north and the Thippagondanahalli Reservoir in the west. These sources are all but dead now due to the depletion of catchment areas in the wake of uncontrolled infrastructure expansion. This makes Bengaluru critically dependent on the Cauvery — some 100 km away, and now the principal source of the city’s drinking water — and the monsoon. Residents get 65 litres per capita per day (lpcd) on average, less than half the ideal amount of 150 lpcd. Of the 270 thousand million cubic feet (tmc ft) of water that was earlier allocated to Karnataka from the Cauvery, 17.64 tmc ft was used every year for the city’s drinking water needs.

#### **Continuing depletion of sources...**

Only about 70 of the 272 lakes in and around the city from four decades ago survive. The government has reclaimed dozens of lakes for bus stands, stadiums, and housing complexes, and real estate firms have been the major beneficiaries of land allotment on lakeshores. Garbage and sewage have poisoned lakes, and the concretisation of catchment areas has choked inlet channels.

#### **There’s cushion, and a plan !!**

In its response to the BBC report, the BWSSB said it would be able to provide adequate water to the city for the next decade by effectively using current supplies, tapping into rainwater sources, and recycling wastewater. In the end though, as BWSSB said in its response to the BBC report: “Great responsibility lies with the citizens of Bengaluru to use water judiciously and to save water. Rampant exploitation of groundwater should be avoided and rainwater harvesting should be undertaken in a way to replenish the groundwater.”

#### **QUESTIONS:**

1. List the cities that according to this report are to face a problem a water scarcity in the coming years.
2. Name the state agency which manages water supply and sewage disposal in Bangalore.

	<p>3. Why have only 70 lakes survived out of the 272 in and around the city.</p> <p>4. How can the citizens contribute in solving the serious problem concerning water shortage in Bengaluru?</p> <p><b>C) POSTER ( 5 MARKS)</b>  Make a poster on water conservation on an A4 size sheet.</p> <p><b>Instructions:</b></p> <ul style="list-style-type: none"> <li>● Use A-4 size coloured sheets for Part A, B and C.</li> <li>● Make a cover page of your project.</li> <li>● Use pictures, diagrams and graphs to make your project interesting.</li> <li>● Part A, B, C to be submitted in one file.</li> <li>● Poster to be attached at the end.</li> <li>● Handwritten projects to be submitted.</li> </ul>
<p><b>Science</b></p>	<p><b>Biology:</b> A balanced diet is very important for our body. Whatever we eat is reflected on us. We should eat a balanced diet everyday so that the nutrients required for the growth and development of our body should reach their respective places.</p> <p>You have to prepare a <b>project</b> on '<b>Nutrition of Human Beings</b>'. <b>(10)</b></p> <p>Prepare a detailed report by writing down the food you will eat during breakfast, lunch, supper and dinner during your summer vacation. Write down the nutrients being provided to your body by each food item. You can divide the nutrients into fats, minerals, proteins, carbohydrate, vitamins . Include water and roughage intake also. Analyse the diet you are taking and write down the nutrients that are missing in your diet. Now suggest yourself the correction , it can be addition or deletion of food items so that you get balance diet everyday. Prepare the report for at least 20 days. You can support your report with pictures of food items, your own photograph, data or theory you want to give from various other sources. Also if you are changing your routine for example you are engaging yourself in some sports activity like swimming or badminton then suggest the change in diet to support the energy requirement by your body.</p> <p><b>*You may use A4 size colored sheets for the project.</b></p> <p><b>Rubrics:</b>  Neatness: 2  Creativity: 3</p>



	(b) Artificial Intelligence            11- 20 (c) Virtual Reality                        21- 30 (d) Wireless Network                    31- 40 (e) Cyber Safety                            41 onwards
<b>Art</b>	<b>Card Making:</b> Make a <b>card</b> of size 4 inch by 6 inch, theme ' <b>Floral Design.</b> ' Use your creativity in any way, but black pen should be used for outlining your designs. <b>(10)</b> <b>Note:</b> Write your name, class and section.
<b>ATL Club</b>	Prepare one Greeting card using paper circuit. Theme: Robotics
<b>General Knowledge</b>	Students have to maintain a separate notebook maintaining the record of current affairs of each day starting from 20 <sup>th</sup> May, 2018. The following template needs to be followed- National News – International News – Sports or any other –  <b>Note: After summer vacation KHMS G.K. Quiz will be conducted. The syllabus is as follows:</b> Language & Literature                    1-7 Environment Around                        17-24 Current Affairs                                May-June-2018

**All the best !! Spend your vacation joyfully and in the most constructive manner :)**

You can do anything  
if you have enthusiasm.



Imagine

*with all your mind.*

Believe

*with all your heart.*

Achieve

*with all your might.*

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