

HOLIDAY HOMEWORK CLASS –VII

ENGLISH

Your holiday homework this year is a fun mix of all the aspects of the language. It has been designed to ensure that you enjoy and learn at the same time.

1. Read the famous book 'Oliver Twist' by Charles Dickens
 - Write a short summary of the story (75 words) and name the main characters.
 - Choose 10 interesting adverbs from the book and find their dictionary meanings.
 - Find one synonym and one antonym for all the 10 words.
 - Make meaningful sentences using any 10 words.
 - Present your work creatively.

Remember, you will have an FA based on the story and the incidents, so ensure that you read the entire text.

2. Make a display card of A4 size :
 - a) Use an A4 size pastel sheet of green, yellow or light blue colour.
 - b) Paste the picture of any one of the following authors- Rabindranath Tagore, Ruskin Bond, O Henry and William Shakespeare. Below it provide the following information about the author-
 - Date of birth
 - Popular works
 - Awards received

Laminate the card and present it beautifully.

3. Make a beautiful bookmark for your Literature reader. Decorate it and write an inspirational quotation which inspires you. Get the bookmark laminated.
4. Practice your grammar skills throughout the holidays. Use some or all of the following websites:
 - <http://www.bbc.co.uk/bitesize/ks2/english/>
 - http://www.englisch-hilfen.de/en/exercises_list/alle_grammar.htm
 - http://www.testdesigner.com/questions/Grammar/Grade_7
 - <http://www.learnenglish.britishcouncil.org/en/english-grammar/>

MATHS

1) Discovery learning is a powerful instructional approach that guides and motivates learners to explore information and concepts in order to construct new ideas, identify new relationships and create new models of thinking and behavior. It encourages integration of new knowledge into the learner's existing knowledge base and clearly connect to the real world.

To inculcate the discovery learning in Mathematics the students are required to explore the given concepts and develop a power point presentation depicting their understanding about the concept. Refer to NCERT Mathematics Book of Class VII.

You are required to email your presentation on the school email id with the subject – **Maths Holiday Homework of class VII by 'Name of the Student'**.

Group 1: Roll No. 1 to 6

Topic: Properties of Integers

Group 2: Roll No. 7 to 12

Topic: Multiplication of Integers using patterns

Group 3: Roll No. 13 to 18

Topic: Related Angles (definition and their properties)

- i) Complementary Angles ii) Supplementary Angles iii) Adjacent Angles
- iv) Linear Pair v) Vertically opposite angles

Group 4: Roll No. 19 to 24

Topic: Angles formed by a transversal and two non parallel lines

- ii) Angles formed by a transversal and two parallel lines

Group 5 : Roll No. 25 to 30

Topic: i) Classification of triangles in terms of angles and sides

- ii) Median and Altitude of each type of a triangle.

Group 6: Roll No. 31 to 36

Topic: To prove that the sum of three angles of a triangle is 180° .

Group 7: Roll No. 37 to 44

Topic: i) Isosceles triangle property

- ii) Exterior angle property.

II Do the following worksheets in your worksheet notebook.

Chapter : Integers

Word Box

Direction: Complete the statements by writing the word from word box on the spaces provided. Each word may be used once, more than once or not at all.

left	right	one	zero
negative	positive	even	odd

1. Integers contain whole numbers and _____ numbers.
2. On a number line, when we add a positive integer or subtract a negative integer, we move to the _____.
3. We move to the _____ on a number line if we add a negative integer or subtract a positive integer.
4. If we add two negative integers, we obtain a _____ integer.
5. If we add two positive integers, we obtain a _____ integer.
6. The additive identity for integers is _____.
7. _____ is the multiplicative identity for integers.
8. Product of a negative and a positive integer is always _____.
9. If the integer -1 is multiplied _____ number of times, the product is (-1) .
10. The product of any integer with zero is _____.
11. The sum of an integer and its additive inverse is always _____.

Multiple Choice Questions

■ Tick (✓) the correct answer for each of the following:

1. When we add a positive integer and a negative integer, the result
(a) is always positive (b) is always negative
(c) is zero (d) can be positive or negative
2. The next term of the pattern $-8, -3, 2, 7, \dots$ is
(a) 11 (b) 12 (c) 13 (d) 14
3. Integers are not closed under
(a) addition (b) subtraction (c) multiplication (d) division

4. Which of the following pairs of integers does not have -5 as their sum?
 (a) $-4, 1$ (b) $-2, -3$ (c) $-7, 2$ (d) $-8, 3$
5. Which of the following pairs of integers have 8 as their difference, when first integer is subtracted from the second?
 (a) $-6, 14$ (b) $8, 0$ (c) $-4, 4$ (d) $3, -11$
6. The smallest positive integer is
 (a) 1 (b) -1 (c) 0 (d) not defined
7. The quotient obtained on dividing zero by any non-zero integer is
 (a) the integer itself (b) 0 (c) 1 (d) not defined
8. The value of the expression $5 - \{5 - (5 - 5 + 5)\}$ is
 (a) 0 (b) 5 (c) 10 (d) -5
9. The integer which is equal to its additive inverse is
 (a) 1 (b) -1 (c) 0 (d) any integer a

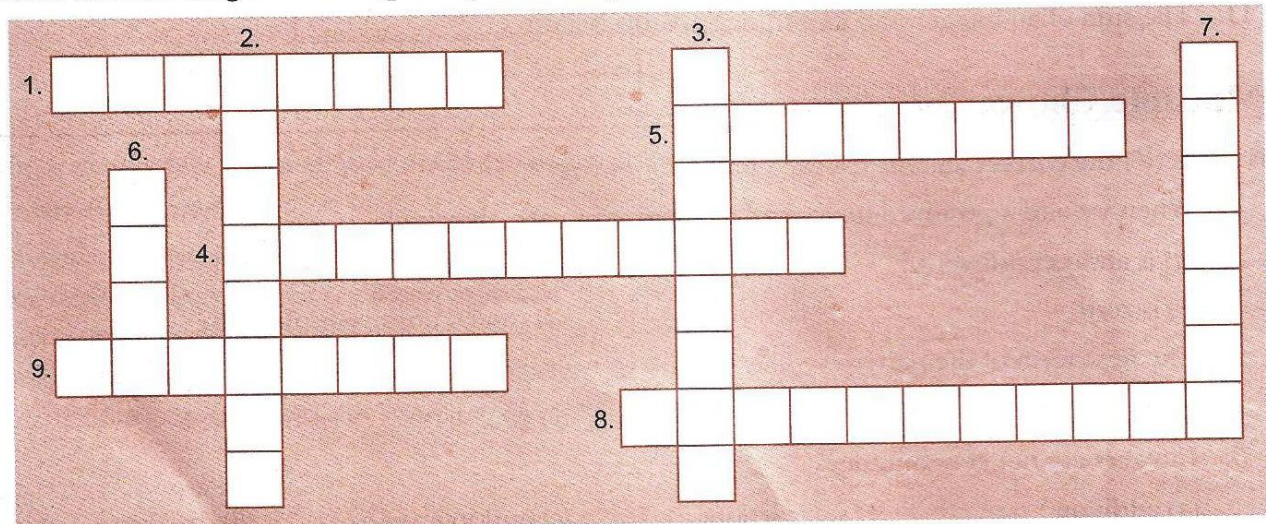
Match the Columns

1. Match the expressions in column I with their values in column II.

Column I	Column II
(i) $(-a) + a$	(a) 1
(ii) $(-a) \div (-a)$	(b) 0
(iii) $(-a) \times (-1)$	(c) $-a$
(iv) $a \div 0$	(d) a
(v) $a \times (-1)$	(e) -1
(vi) $a \div (-a)$	(f) not defined

Puzzle

- Solve the following crossword puzzle, hints are given below:



Across

- 1 is the multiplicative _____ for integers.
- _____ property of addition states that $a + (b + c) = (a + b) + c$ for integers a , b and c .
- All natural numbers, zero and negatives of natural numbers.
- _____ property of multiplication states that $a \times b = b \times a$ for integers a and b .
- Sum of two positive integers.

Down

- Sum of two negative integers.
- Operation under which integers are not closed.
- Product of a non-zero integer and zero.
- $-a$ is the additive _____ of the integer a .

Quiz

Rapid Fire

State true (T) or false (F) for each of the following statements:

- Every integer is a whole number.
- -7 is smaller than -8 .
- Additive inverse of -10 is 10 .
- When we add a negative integer to a positive integer, we always get a positive integer.
- $a - (-b) = a + b$ for all integers a and b .
- If we move 5 steps to the left of 3, we will reach the number 8.
- 0 is a positive integer.
- -1 is the greatest negative integer.
- $(-7) + (-3) < (-7) - (-3)$
- Whole numbers and integers are closed under addition as well as subtraction.
- Commutative property of addition states that $(a + b) + c = a + (b + c)$ for integers a , b and c .
- Product of two negative integers is also negative.
- If we multiply (-1) , $2m$ times, where m is a natural number, we get 1.
- Division is commutative for integers.
- For any integer a , $1 \div a = 1$.
- a is the additive inverse of $-a$.

Thinking Skills

- What will be the sign of the product if we multiply together seven negative integers and five positive integers?

- Multiplication of whole numbers is repeated addition. Is multiplication of negative integers repeated addition? If not, then how it should be defined?

Assignment

1. Write a pair of integers whose

- (i) sum is an integer smaller than both the integers.
- (ii) sum is an integer smaller than only one of the integers.
- (iii) sum is zero.
- (iv) difference is an integer greater than both the integers.

Sol.

2. Find $(-25) \times (-32)$ using distributive property.

Sol.

3. Suppose the distance above the ground is represented by a positive integer, then that below the ground will be represented by negative number. If an elevator descends into a mine shaft at the rate of 6 metre per minute; what will be its position after half an hour?

Sol.

4. A shopkeeper earns a profit of ₹10 by selling one geometry box and incurs a loss of ₹ 5 while selling lunch box which are defective.

- (i) In a particular month, he incurs a loss of ₹ 50. In this period, if he sold 25 geometry boxes, how many lunch boxes did he sell?
- (ii) In the next month, he earns neither profit nor loss. If he sold 50 lunch boxes, how many geometry boxes did he sell?

Sol. (i)

(ii)

5. Simplify: $639 - (-436) + (-839)$

Sol.

6. Simplify: $69 - [34 - \{85 + (16 - 17 - 34)\}]$

Sol.

7. Simplify: $18 - (-5) [\{5 - 8 - 3\} \div 5 \{3 + (-3) \times (-6)\}]$

Sol.

8. Simplify: $26 - 6 \times 2 \text{ of } 9 + (40 - 20) \div 5$

Sol.

9. Subtract the sum of 873 and -3000 from the sum of -904 and 7093.

Sol.

10. The sum of two integers is 310. If one of the integer is -80 , find the other integer.

Sol.

III) Practice your mathematical skills by visiting the given webpage and solve questions in the following links: **D.1, D.2, E.1, E.2, E.4, E.5, E.6, E.7, E.8, E.9, F.3, F.4, F.5, F.6, F.8, G.1, G.2, G.3, G.4, G.5, G.8, G.9, G.10** on <http://www.ixl.com/math/grade-7>

IV) Bring articles, amazing facts, riddles, cross-words, recent discoveries in the field of Mathematics for the school biannual Mathematics newsletter (minimum 2).

SOCIAL SCIENCE

GEOGRAPHY

CONSERVING RESOURCES

Resources are features of environment that are important and of great value to human in one form or the other. However, the advancement of modern civilization has had a great impact on our planet's natural resources. As human population increases, natural resources and habitats become more limited. So, conservation of natural resources has become very essential today. There are many ways to conserve natural resources. All we need to do is to look around and see what natural resources we are using and find out ways to limit our usage.

Let's find out how do we utilize our resources and what can we do to conserve resources. The home work has to be done in a notebook.

Group-I Roll no. 1-13

Colony water trip-

There is scarcity of water in Delhi. So, conservation of water is essential for every citizen. Every house is getting water from either municipal or private organisation.

- .1) Find out the source of water you get at home
- 2) Do you have a water meter at your house?
- 3) If yes what does it look like? Draw and label a water meter.
- 4) What are the measurement units used in water meter?
- 5) What is the name of the institution supplying water?
- 6) Collect water bill of your house. Find the total consumption in a month. Check out the rate of water per unit consumed. Photocopy the bill and attach it to the activity.
- 7) Draw a map of water flow into and out of your house with major stops like overhead tanks, washrooms etc.

Group-II Roll no. 13-23

Talk about electricity

Did you know that till about 40-50 years, electricity used in the most parts of India was minimal? Ask your Grandparents if they had electricity at home when they were kids. They would definitely have interesting stories to share on what a surprise it was for them. Based on the reading of meters, your electricity bill is finalized. Many people complain about inflated bills while there are others who temper with their meters to make them slow. To tackle theft of electricity in Delhi, the

government decided to privatise its distribution in 2002. May be its time you had a look at your electricity bill to see if you have an inflated bill and answer the following questions :

- 1) Which agency has issued the bill? Is it a public or private agency?
- 2) What is the unit used to measure electricity consumption?
- 3) What is the rate of electricity per unit? How does the rate changes as the units increase?
- 4) Get a photocopy of the bill and attach.
- 5) Go to your nearest electricity board office and interview an engineer. See if you can get answers to the following questions:
 - a) Where is the electricity generated?
 - b) How is it produced?
 - c) Why does load shedding happen?
 - d) How does the electricity board save electricity at a larger level?

Group-III Roll no. 24- 37

Talk about LPG

Like all fossil fuels, LPG is a non-renewable source of energy. It is extracted from crude oil and natural gas. At room temperature LPG is a gas but when it is compressed in a cylinder it becomes a liquid. It is usually compressed and kept in metal cylinders. It can be easily condensed, packaged stored and utilized, which makes it an ideal energy for wide range of applications. Answer the following question:

- 1) How is LPG used in your home?
- 2) Find out how many Kg's of LPG does your home consume in a month?
- 3) Locate the nearest LPG filling station. Find out the name of the company which operates it?
- 4) How many vehicles did you see there?
- 5) Is filling station able to cater to its entire customers?
- 6) Find out how many LPG companies and stations does your city have?
- 4) Interview a person having an LPG vehicle and write down the advantage and disadvantages of driving an LPG vehicle.
- 5) Go to nearest the petrol pump or automobile workshop and find out:
 - a) Do they supply LPG kit?
 - b) Find out the cost of LPG and CNG kit?

Group-IV Roll no. 37-48

Talk about waste

Segregation of waste means assorting it and pulling similar things together. The primary segregation is on basis of biodegradable and non-biodegradable products. The kinds of waste which decay biologically are biodegradable (food materials, garden waste etc).While those which do not are non biodegradable (plastic materials, glass etc). Find out about the waste and the following questions:

- 1) Find out how waste is managed in your house .Is it segregated? Write a short note on it.
- 2) Does anyone collect waste from your house or do you go to nearest dustbin to dispose it?
- 3) Visit the collection point in your locality, click photographs and describe its condition there.
- 4) Find out who takes away garbage from this point and how?
- 5) Talk to a person who takes away waste materials from the dustbin near your locality and interview him based on the given questions.
 - a) What kind of waste do you collect?
 - b) What do they do with collected garbage?
 - d) Where do they dump it?
- 6) Name a lush green park in Delhi which was a huge garbage dump 10 years ago. Visit the park and write a short note.

SCIENCE

1. ACTIVITY 1: Prepare a solution of soap and then add a few drops of turmeric solution to it. Now add vinegar drop by drop using a dropper. Shake the solution every time you add vinegar. What happens after sometime? Write down your observations and explain the reaction taking place.

2. ACTIVITY 2 :Fit a balloon to the mouth of a glass bottle with a narrow neck. Place the bottle in a pan of water and heat it. Note your observations. Now take the bottle out of the pan and allow it to cool. What happens now? Write the conclusion of this activity. **Take the help of an adult while doing this activity.**

3. Make a crossword puzzle on the topic “ Nutrition in Plants”. Visit the site classhelper.org for making the crossword. Also take a print out of the crossword generated by you.

4.The Science department is planning to start a Science newsletter shortly. For making this happen bring articles, amazing facts, riddles, cross-words, recent discoveries in the field of Science (minimum 2).

Note: All the work has to be done in the FA notebook.

FRENCH

- ✓ **Make at least two sentences each with the following words:**

Parler, maison, rouge, avion, chaise, etudiant-e, indien-enne, mois, plage, sport, pays, voiture, pomme, glace, habiter.

- ✓ **Project**

Make a chart on different professions in France. You can choose from the list below or any other profession of your choice.

<u>Topics</u>	<u>Roll No.</u>
• Le chanteur/La chanteuse	1-10
• Le musicien/la musicienne	11-20
• Le medecin	21-30
• Le cuisinier	31-40
• Le Boulanger	41-50
• Le peintre	

Customisation: The chart should provide answers to the following questions.

- Give a brief explanation regarding the profession.
- What are the famous people who are associated with this profession?
- The importance of the profession in today's world.
- Any other important or interesting fact associated with this profession.

Instructions

1. Draw and/or cut out pictures
2. Take the help from newspapers/magazines/internet

COMPUTER

Electronic mail, commonly known as **email** or **e-mail**, is a method of exchanging messages from one to one or more recipients. In this summer vacation, create an e-mail account. Mail the same presentation which you have made in Mathematics Holiday Homework to **skool.saket.del@apj.edu** using your own email id.

संस्कृत

- 1) दिए गये प्रत्येक विषय के आधार पर दो श्लोकों का संग्रह कीजिए ।
(विद्या ,वृक्ष, परिश्रम ,परोपकार)
- 2) इकारान्त, ईकारान्त, तकारान्त तथा सर्वनाम शब्दरूपों को स्मरण करके लिखिए ।
- 3) पठ् ,अस् ,कृ, गम् तथा पा धातुओं के लृट्, लोट्, तथा लङ् लकार के धातुओं को स्मरण करके लिखिए ।
- 4) नैतिक शिक्षा से संबन्धित संस्कृत में एक कथा लिखिए ।

नोट- मुल्यांकन का आधार विषयवस्तु व प्रस्तुतीकरण है ।

यह सारा कार्य A-4 शीट में करना है ।

हिंदी

1. हिंदी में छपने वाली बाल पत्रिकाओं के नाम लिखिए ।
2. किसी एक बाल पत्रिका के लिए दो आकर्षक पृष्ठ बनाइये ।
 - इन दोनों पृष्ठों के लिए मनपसंद विषयों (लघु कथा ,कविता, विद्यालय जीवन की यादगार घटना,ज्ञान की बातें ,सुविचार,क्रिएटिव कॉर्नर या पहेली आदि) का चयन कीजिए और उन्हें लिखिए । चयन किए गए विषयों को इस प्रकार प्रस्तुत कीजिए कि सभी पत्रिका के इन पृष्ठों को पढ़ना चाहें ।

3. महाभारत के प्रथम सात अध्याय पढ़कर प्रत्येक अध्याय से एक प्रश्न बनाइये और उसके उत्तर भी लिखिए ।

नोट - समस्त कार्य एक नोटबुक में कीजिए ।

कार्य का मूल्यांकन मौलिकता और विषयवस्तु के आधार पर किया जाएगा ।

BOOK CLUB

Reading helps you to foster empathy, morality, critical thinking, imaginations and creativity; it not only broaden your interests, spark your passions, but also inspire you to think and do great things. Joining a book club is one of the greatest ways to develop all of these wonderful qualities. Our school also has a Book Club. Any student can be the member of this book club. Every month we choose a book to read and given a month time to read it. Then we have a discussion on the book in which anything related to the book, content or an interesting part of the book is read out.

The core idea of a book club is to come to express, share . As people, we can learn things independently, come up with great ideas alone, or enjoy books by ourselves. But a special feeling arises when we come together to share these experiences. It is human nature to want someone to hear what you have to say. It's empowering! It's fun! And it's what the book club is all about.

During this summer vacation the book to be read is "Harry Potter and the Philosopher's Stone by J.K. Rowling".