## Assignment for Summer Break 2019-20

## "Do Aliens Exist?"

Dear Student,


New Session! New Books! New Friends! Activities \& Unit Test-1 have kept you buzzing for a while and now the much awaited vacations are round the corner. When the sun is high and the heat is great, it is time to go for a vacation or pursue a recreation. It's time to remain with family nembers, relatives \& friends.
However, takeout some time from long summer days and switch on the "search engines" of your mind inexploring and learning.
Wish you al \& your family a very enjoyable and fun packed summer break!!!
GENERAL INSTRUCTIONS:

- The assignments carry 05 marks for each subject:
- The assignments should be hand written on coloured A4 size sheets/as specified.
- Mention your name, class, and roll no.
- It should be well presented and pictorial wherever possible.
- General Awareness: To keep your general awareness updated login TUK daily.
- We would appreciate that you do your work honestly and independently.


## INTRODUCTION

"There may be aliens in our Milky Way galaxy, and there are billions of other galaxies. The probability is almost certain that there is life somewhere in space"-
Buzz Aldrin
Do Aliens exist? This question has baffled humans ever since prehistoric man noticed the bright stars in our sky. Thousands of paranormal sightings have been recorded on video since then, with many controversial theories about Alien generating much interest among UFO hunters.
The idea that we have people on other planets is of incredible interest and fills us all with excitement.

With reference to the above lines, do the given activities.........

## ENGLISH LITERATURE

Imagine that you are Velu from $\mathrm{Ch}-2$ of the supplementary reader, who has visited the land of aliens and had an interaction with one of them. You named him 'Spark'. You discussed the problems you face on earth and shared your feelings with him. Write your views in about 80 to 100 words about the interaction you had with the alien.

## NOTE

Read the first two chapters of the supplementary reader for reference to the problems you discussed with the aliens.

## ENGLISH LANGUAGE

## Letter Writing

Write a letter in about 120-150 words to a Senior Scientist of NASA informing him about a 'code language' you have invented which may help the humans to communicate with the aliens.

## OR <br> Creative Writing

Write self composed poem/short story on any theme of your choice. Best entries will be displayed.

## SCIENCE

Typography is the art of arranging 'type' to make written language legible, readable and appealing when displayed. It is also applied to the style, arrangement \& appearance of the letters, numbers \& symbols created by the process.
Design a typographic Alien of your imagination by choosing the symbol of any one element and by arranging the properties of that element in an attractive way. [Here is an example of Nitrogen]


## SOCIAL SCIENCE

Find any 10 UFO sightings in the world and write the following information in the tabular form.

- Name
- Year
- Place

Imagine 'Spark' wants to visit India. Which state you would suggest 'Spark' to visit? Give him the following information :

- Location (zone, latitude, longitude)
- Resources found
- Type of landforms
- Kind of the flora and fauna available there
- Type of soil


## HINDI

आप सभी ने हितिक रोशन की फिल्म 'कोई मिल गया' देखी ही होगी। उसमें 'जादू' एक एलियन होता है जिसके पास शक्तियाँ होती हैं। वह हितिक रोशन को कुछ शक्तियाँ देता है। कल्पना कीजिए कि आपको 'स्पार्क' नामक एलियन कुछ शक्तियाँ देता है। उन शक्तियों से आप मानव जाति की कौन-सी एक समस्या का समाधान करेंगे। (100 से 120 शब्दों में)

## SUGGESTED ACTIVITIES:

Summer vacation is probably the happiest period in a student's life. Apart from doing holiday homework, do some activities with your friends and family.

- Learn to sew buttons/fix a fuse/replace the tyre/use washing machine.
- Attend self-defense training programs if possible.
- Join a library and read lot of books.
- Go for morning walks with grandparents/parents.
- Make a healthy menu for your family atleast for a week and assist your mother in daily chores.
- Watch movies on Aliens, Artificial Intelligent Robotics etc.
- Watch English News Channels to enhance your general knowledge \& pronunciation.


## MATHS

Note: Do the following homework in thin notebook.
It appears 'Spark' has been without food for long and you are unable to decipher the code message that could reveal his food likings. Each letter of the message has been replaced by a number. Use your logical and mathematical reasoning skills to solve the given puzzles and decode the secret message.
Each puzzle represents the depicted letter. In the provided table keep writing these letters above the number it stands for. Your answers will decode and complete the secret message.

| (Candy Crush) <br> Monu and Raju were given ' $m$ ' number of toffees each. Each of them consumed 7 toffees. The combined number of toffees now left is equal to m . What is the value of $m$ ? <br> Letter-A | (Happy Family) <br> Roy dad is three times older than Roy. Roy's grandfather is twice as old as Roy's dad. The sum of all their ages is 100. How old is Roy? <br> Letter-E | (Polygon) <br> If the sum of all angles of a hexagon is increased by '10' \& then divided by ' 2 ' then what degree am $I$ ? <br> Letter-G |
| :---: | :---: | :---: |
| (Magic Number) I am a 4-digit even number and some of my digits are same. The sum of all my digits is 10 . The digit at tens place is 4 and that at hundreds place is half of it. <br> What number am $I$ ? <br> Letter-I | (Is Squaring odd?) What is the sum of the first 100 odd numbers? <br> Letter-R | (Euler's Mind) <br> For any polyhedron, if we subtract edges from the sum of faces \& vertices, then we get always a constant number. <br> Letter-T |
| (Calendar Stories) <br> Guess the next number in the given pattern 90,120,151,181,212 $\qquad$ <br> Letter-O | (Upside down-way to go!) <br> At what number is the car parked? <br> Letter-H | (Number tricks) Find the possible value of ' $N$ ' for which 4-digit number N315 is divisible by ' 9 '. <br> Letter-N |


|  |  |  |  | LL |  |  |  |  |  |  | W S |  |  |  |  | S |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2242 | 10 | 14 | 2 | 14 | 2 | 87 | 14 | 2 | 365 | 10,000 | 242 | 242 | 9 | 2242 | 9 | 10 |

## Mathematics Recap Assignment <br> Class - VIII

## Solve the following :

Q1. Represent $\frac{-2}{5}$ and $\frac{1}{10}$ on same number line.
Q2. Let $O, P, Z$ represent the numbers 0,3 and -5 respectively on the number line. Points $Q, R$ and $S$ are between O and P such that $\mathrm{QQ}=\mathrm{QR}=\mathrm{RS}=\mathrm{SP}$. What are the rational numbers represented by the points $Q, R$ and $S$ ?
Q3. In adjacent fig. bisectors of $\angle P$ and $\angle Q$ meet at a point $M$. if $\angle R=110^{\circ}$ and $\angle S=60^{\circ}$, then find the measure of $\angle P M Q$.


Q4. A regular pentagon $A B C D E$ and a square $A B M N$ are formed on opposite sides of AB . Find the value of $\angle B C M$.


Q5. Fill in the boxes $144 \xrightarrow{2 h^{-3}} \square \times 12 \rightarrow-1 \times 3 \xrightarrow{-1} \square$
Q6. Simplify $\frac{1}{2+\frac{1}{1-\frac{2}{3+\frac{1}{3}}}}$
O7. Find the sum of $3.34 \times 10^{20}$ and $6.56 \times 10^{18}$.
Q8. Find the value of $x$ if $(-7)^{x+3} \times 3^{2 x+6}=3969$.
Q9. If $25^{x}=125^{y}$, then $\frac{x}{y}=\frac{2}{3}$
Q10. Find ' a ' if $5 \sqrt{5} \times 5^{3} \div 5^{3 / 2}=5^{a+2}$
Q11. Find the value of $\frac{2^{2001}+2^{1999}}{2^{2000}-2^{1998}}$.
Q12. Simplify : $222-\left[\frac{1}{3}\{42+(56-\overline{8+9})\}+108\right]$
Q13. If $\frac{x}{y}=\left(\frac{-2}{3}\right)^{3} \div\left(\frac{8}{3}\right)^{3}$, find the value of $\frac{x+y}{y}$
Q14. Simplify : $\left(x^{a}\right)^{b-c} \cdot\left(x^{b}\right)^{c-a} \cdot\left(x^{c}\right)^{a-b}$
Q15. Find the value of $x:\left(\frac{2}{5}\right)^{3} \cdot\left(\frac{2}{5}\right)^{2 x-1}=\left(\frac{2}{5}\right)^{6} \div\left(\frac{2}{5}\right)^{2}$
Q16. If $a=2, b=3$ then find the values of (i) $(a+b)^{b}$
(ii) $\left(\frac{a}{b}+\frac{b}{a}\right)^{a}$

Q17. Value of $(4096)^{5 / 6}$ is $\qquad$
Q18. Find the value of $\mathbf{m}$ for which $2^{m} \div 2^{-4}=4^{5}$.
Q19. Find $x \& y$ in the given parallelogram ABCD.


Q20. PQRS is a rectangle whose diagonals meet at O . If $O Q=x+5$ and $O R=2 x+3$, find $\mathbf{x}$.

