

**SAINIK SCHOOL BALACHADI**  
**2018-19**  
**SUMMER VACATION : HOLIDAY HOMEWORK**  
**CLASS – IX**



• **ENGLISH**

1. Write a story in 150-200 words beginning with the following line and give it a suitable title:  
A man woke up in the morning. Through the window he saw that the sky was misty. He looked at a wall clock which had a calendar which showed 27 May 2050. He was surprised.....
2. Write a paragraph on the following topics (80-100 words)
  - (1) A personal habit I'd like to change
  - (2) Obstacles are what you see when you take your eyes off the goal."
  - (3) A book I just read
3. Answer the following questions in about 100 -150 word each:  
(BEEHIVE TEXTBOOK & MOMENTS S.R)
  - (1) Write a note on the theme of the story 'The Lost Child'.
  - (2) Why did Margie feel that children in old times had fun while studying in school?
  - (3) Describe the condition of the child after he had lost his parents at the fair.
  - (4) Suppose you are Margie. Write a diary entry dated 17th May, 2157 about Tommy's real book that he found in his attic.
  - (5) Based on your understanding of the poem 'The Road Not Taken', write a diary entry of the speaker in the poem about the day he had to make a choice.
  - (6) What important lesson does the life of Evelyn Glennie and Bismillah Khan teach us?
4. Write a letter to your Friend asking him to be a part of Summer Vacation with you.
5. Identify the figures of speech in the following sentences:
  - (i) She sells seashells.
  - (ii) The camel is the ship of the desert.
  - (iii) O Hamlet! Thou has cleft my heart in twain.
  - (iv) Life is as tedious as a twice-told tale.
  - (v) Variety is the spice of life.
  - (vi) Pride goeth forth on horseback, grand and gay
  - (vii) Walter wondered where Winnie was.
  - (viii) The pale moon like a petal
  - (ix) Beauty walks in the woods waking flowers from wintry sleep,
  - (x) Fred fried frogs.

• **HINDI**

1. अपने विद्यालय में एक वाद विवाद प्रतियोगिता आयोजित करनी है। विद्यालय के सूचना पटल पर लगाने के लिए एक घोषणा-पत्र बनाइए, जिसमें प्रतिभागियों को आमंत्रित किया गया हो तथा विषय भी बताया गया हो।
2. आपके पिता जी कपड़े के व्यापारी हैं। उन्हें अपना कारोबार बढ़ाने के लिए एक विज्ञापन बनाना है। आप अपने पिता जी के व्यापार व शौरुम की विशेषताओं का वर्णन करते हुए एक विज्ञापन तैयार कीजिए।
3. आने वाली परीक्षाओं से संबंधित प्रश्न व जानकारी के लिए अध्यापक व शिष्य के बीच के वार्तालाप को संवाद के रूप में लिखिए।  
अथवा  
दो पड़ोसियों के बीच बढ़ती महुँगाई को लेकर हुई बातचीत को संवाद के रूप में लिखिए।
4. कोई सुगठित समाचार तैयार कर उसका प्रभावपूर्ण लेखन करें। जिसके अंतर्गत मुख्य समाचार, विस्तार से समाचार, खेल जगत और मौसम की जानकारी दी गई हो।

**MATHEMATICS**

1. Design a crossword puzzles using mathematical terms and words.
2. Construct a square root spiral.
3. History of mathematicians who gave the concept of coordinate geometry.
4. How can you apply polynomials in real life?
5. Worksheets on polynomials
6. Answer the questions
  - (a) If  $x^2 + kx - 35 = (x - 5)(x + 7)$ , find the value of k.
  - (b) Find the sum of the zeroes of the polynomial  $y^2 + 9y + 20$ .
  - (c) If  $36x + 36$  is divided by  $(x + 1)$ , find the remainder.
  - (d) If  $(x - 1)$  is a factor of  $x^4 + 3kx + 2x^2 - 1$ , find the value of k.
  - (e) Find the remainder when  $-2x^2 + 2x + 5$  is divided by  $x - 2$ .
  - (f) Find the product of the zeroes of the polynomial  $m^2 - 17m + 72$ .
  - (g) If  $f(x) = 5x + 3$ , find  $f = 1$ .
  - (h) For  $f(x) = ax^2 + bx + c$ , if  $f(1) = 8$  and  $f(-1) = 4$ , find the value of  $a + c$ .
7. Write what amuses in mathematics and why? (Think for sometime and be honest)

• **SCIENCE**

**BIOLOGY**

1. Write 5 points of difference between prokaryotic cell and Eukaryotic cell.
2. Explain structure and function of :

- A) NUCLEOUS
  - B) PLASMA MEMBRANE
  - C) CELL WALL
  - D) CYTOPLASM
  - E) MITOCHONDRIA
  - F) ENDOPLASMIC RETICULUM
  - G) GOLGI APPARATUS
3. WRITE 3 POINTS OF DIFFERENCE BETWEEN DIFFUSION AND OSMOSIS
  4. What is Plasmolysis?

### WORK SHEET

1. Draw a neat and labeled diagram of compound microscope.
2. Draw a neat and labeled diagram of Animal Cell.
3. Draw a neat and labeled diagram of cell.

### CHEMISTRY

1. Tabulate the difference in the characteristics of three states of matter
2. Write down the characteristics of the particles of matter?

### PHYSICS

1. A bus was moving with a speed of 54km/h. On applying brakes, it stopped in 8 seconds. Calculate the acceleration and the distance travelled before stopping.
2. A motor cycle moving with a speed of 5m/s is subjected to an acceleration of 0.2m/s. Calculate the speed of the motor cycle after 10s and the distance travelled in this time.
3. Identify one real life example for each type of motion
  - i) acceleration in direction of motion
  - ii) acceleration against direction of motion
  - iii) acceleration is uniform
  - iv) acceleration is non uniform
4. Textual Exercise questions from 1 to 9 EXCEPT 7 (page number 112)
5. Explain in detail on distance time graph and velocity time graph.

### • SOCIAL SCIENCE

KNOW YOUR INDIA / LOCALITY :- PREPARE A WELL ILLUSTRATED AND WELL LABELLED PROJECT ON THE FOLLOWING AFTER VISITING TO A PLACE IN SUMMER VACATION OR OF YOUR LOCALITY ( IF NOT POSSIBLE ) :-

1. History of that place , palaces / forts / museums / hydraulic structures which shows how the ancestors used to save water there for whole year / dynasties rule over there
2. Geographical aspects :- changes in temperature within few years over there , vegetation cover / wild life , soil type , minerals , Industries , transport facilities , crops grown there , drainage – lakes /dams / rivers
3. Culture :- food habits , clothing , folk songs & dances prevalent there

If you have done the above mentioned H.W in digital form then you can send it through mail to [lydv17@gmail.com](mailto:lydv17@gmail.com)

OR

Aware people ( friends ,relatives , known , neighbours ) of your surroundings / village/ town /city regarding preservation of environment , trees , wildlife , conservation of water resources , cows etc. resources and prepare a report on it and produce evidence too of your endeavour