

The International School of Bombay

NURTURE • CHALLENGE • SUCCESS

## ACADEMIC SESSION 2025-26

# SUMMER ASSIGNMENT

CLASS -9

Dear

Dear Children,

It is summer time, I hope you would enjoy your holiday to the best of your capacities.

Spend good time with your family,

Try to do your written work regularly to enhance your writing power.

Pay special attention towards your health and hygiene.

Don't Play in the sunshine or on hot places.

**General Instructions:** 

All work is to be done in the subject

notebook. It should be neat and clean.

Read all the homework carefully before starting of the homework.

Please follow the instructions given in each subject homework.

All the Homework will be marked and assessed, so it is COMPULSORY, to do all the subject homework.



1. Read one story book eg: novel, autobiography, memoir etc. Write in about 100-120 words about your favorite character.

\* What did you like the most about book?

\* Who was the author of the book?

\* Draw the cover page of the book by the art form of the place/state/country of the author?

2. Read the story, 'The Fun They Had' by Isaac Asimov. Write the theme of the story and write your ideas about futuristic school and learning education. Also draw your imaginations.

3. Have you ever gone through a situation when you had to take the right decision out of the choices?

\* Was that right decision?

\* What impacts did it have on you?

\* What have you learned from that?

Read the extract and answer the questions that follow:

Could not suppress the desire of his heart, even though he well knew the cold stare of refusal in their eyes.

a. What does 'he' well know?

b. What 'desire of his heart' is being talked of?

c. Why has the narrator said that 'he' couldn't suppress his heart's desire?

d. What did the child do when he couldn't suppress his desire?

4. Fill in the blanks by choosing the most appropriate adverb

from the table.

Out	quickly	Forward	Pretty	too
Before	Often	Once	somewhat	SO

- i. Riya ran to her mother \_\_\_\_.
- ii. The scores are \_\_\_\_.
- iii. We have met \_\_\_\_.
- iv. I know him\_\_\_\_well.
- v. The baby is \_\_ sleepy.
- vi. The naughty boy is \_\_\_\_ annoying.
- vii. My aunt comes to visit us \_\_\_.
- viii. My grandpa is \_\_\_\_ better today.

ix. I met a magician \_\_\_.

- x. Ambition urges us....
- 5. Write rules of spelling with examples.



1. सौरमंडल में नौ ग्रह हैं। शुक्र स्र्यसे क्रमशः दूरी क अनुसार दूसरा और पृथ्वी तीसरा ग्रह है। पररर्ोजना में र्स्र्यसे ग्रहों की दूरी व ववशेषता का वित्र सवहत कम से व्यन कीवजए।

2. स्वतंत्रता आंदोलन में गांधी जी के र्ोगदान पर प्रकाश डालते हुए र्ोगदान का संविप्त र्क्षन कीवजए 1 गांधी जी ने अपनी आत्मकथा में इनका र्क्षनवकर्ा है उसका सवित्र र्क्षन अपने शब्ों में कीवजए 1(आत्मकथा-सत्य के प्रर्ोग)

 आरत की मानवित्र पर वनम्न स्थानों को दशयन अहमदाबाद अमृतसर (जवलर्ांवाला बाग) कला पानी वदल्ली वशमला वबहार उत्तर प्रदेश।
अहमदाबाद में बापू कआश्रम कववषर् में वित्रात्मक जानकारी एकवत्रत कीवजए।



Answer the following questions:

1. Insert a rational number and an irrational number between  $\sqrt{2}$  and

**√**3.

- 2. Find four rational numbers between 3/5 and 4/5.
- 3. Find four irrational numbers between 3/5 and 4/5.
- 4. Find the value of  $(3 + 2\sqrt{5}) (7 2\sqrt{5})$ .
- 5. Find the product (5 +  $\sqrt{7}$ ) (5  $\sqrt{7}$ ).
- 6. Find the value of  $625^{1/2}$ .
- 7. Factorize.

a)  $9x^2 + 30x + 25$ 

b)  $9x^2 - 16y^2$ 

- 8. Find the value of  $(7 + 2\sqrt{5})^2$ .
- 9. Find the value of  $25^{\frac{1}{2}} \div 5$ .
- 10. Represent  $\sqrt{5}$ ,  $\sqrt{9.3}$ ,  $\sqrt{4.5}$ ,  $\sqrt{7}$  on the number line.
- 11. Make a project/model on "Real Numbers".
- 12. From lab manual,

a) To verify the algebraic identity  $(x + y)^2 = x^2 + 2xy + y^2$ .

b) To verify the algebraic identity  $(x + y + z)^2 = x^2$ +y<sup>2</sup>+z<sup>2</sup>+2xy+2yz+2zx.

c) To verify that the sum of the angles of a triangle is 180.

d) To verify experimentally the different criteria for

congruency of triangles using triangle cut-outs.

e) To verify experimentally that the parallelograms on the same base and between same parallel lines are equal in area.

f) To find the values of abscissa and ordinates of various points given in a Cartesian plane.



1)To prepare a brief write up on any concept of the chapter 14 Natural resources in the portfolio file.

2)Write the following experiments in the Physics, Biology , Chemistry practical files. (except the calculations and result

part).

**Physics** 

1. Verification of the Laws of reflection of sound.

2. Determination of the density of solid (denser than water) by using a spring balance and a measuring cylinder.

3. Establishing the relation between the loss in weight of a solid when fully immersed in

a) Tap water

b) Strongly salty water with the weight of water displaced by it by taking at least two different solids.

4. Determination of the speed of a pulse propagated through a stretched string/slinky (helical spring).

5. Verification of the law of conservation of mass in a chemical reaction.

6. Write a detailed note on different types of motion found in your surroundings.

#### **BIOLOGY**

1. Preparation of stained temporary mounts of (a) onion peel, (b) human cheek cells & to record observations and draw their labeled diagrams.

2. Identification of Parenchyma, Collenchyma and Sclerenchyma tissues in plants, striped, smooth and cardiac muscle fibers and nerve cells in animals, from prepared slides. Draw their labeled diagrams.

3. Like different shapes of cells found in living organisms and their uses in living organisms for fiffe work

### **Chemistry**

1. Preparation of:

a) a true solution of common salt, sugar and alum.

b) a suspension of soil, chalk powder and fine sand in water

c) a colloidal solution of starch in water and egg albumin/milk in water and distinguish between these on the basis of transparency, filtration, criterion, stability

- 2. Preparation of
- a) A mixture
- b) A compound

using iron filings and sulphur powder and distinguishing between these on the basis of: appearance, homogeneity and heterogeneity, behaviour towards a magnet, behaviour towards carbon disulphide as a solvent, effect of heat

3. Perform the following reactions and dassify them as physical or chemical changes:

- a) Iron with copper sulphate solution in water.
- b) Burning of magnesium ribbon in air
- c) Zinc with dilute sulphuric acid.
- d) Heating of copper sulphate crystals.
- e) Sodium sulphate with barium chloride in the form of their solutions in water.

#### 4. Determination of the melting point of ice and the boiling point of water.



Make a project on 'The Disaster management' it includes:

- a) Definition
- b) Types of Hazards
- c) Phases

d) Longtime measures taken to reduce the impact of disaster

Answer the following questions in your notebook:

1. The Indian Standard Time is ahead of Greenwich mean-time by how many hours?

2. The eastern most longitude of India is?

3. Which of the following countries share the shortest border with India-Nepal, Myanmar, Bhutan, and Afghanistan.

4. Here is some information about four countries. Based on this information, how would you classify each of these countries? Write 'democratic', 'undemocratic' or not sure against each of these

a) Country A: People who do not accept the country's official religion do not have a right to vote

b) Country B: The same party has been winning elections for last twenty years c) Country C: Ruling party has lost in the last three elections

5. Which of the following personalities quoted 'Democracy is of

the people, for the people and by the people?

Mahatma Gandhi, Albert Einstein, Abraham Lincoln, Rabindranath Tagore.

6. Which ocean is named after India? Give two reasons as to why it was named after India.

7. How does India occupy an important strategic position in South Asia?

8. Democracy cannot get us everything and is not the solution to all problems, then why are we interested in democracy?

9. Capital is a basic need in Agriculture. How is it arranged by Indian farmers? Explain.

10. How many crops are grown by the farmers in Palampur? How are they able to these different crops in a year?



**Part A: Theory Questions** 

Write answers to the following in your computer notebook (in your own words):

- 1) What is communication? Give example of it.
- 2) Explain Different types of communication Method?

Part B: Practical Work (in PowerPoint or on paper)

Create a PowerPoint presentation on "Entrepreneur" (6–8 slides).

Part C: Creative/Research Project

Choose any one topic from below and prepare a report (300– 500 words) with images, tables, or diagrams:

- 1) Impact of Internet on Education
- 2) Latest Technologies in Daily Life (AI, IoT, Smart Devices)
- 3) Role of Computers in Health and Medicine
- 4) History of Programming Languages From Machine Code to Python
- 5) Career Options in Computer Science Fields, Skills, and Scope

You can present this as a Word document or hand-written in a separate file.