

K.C. GURUKUL PUBLIC SCHOOL

Enthusiastic assignment for the scholar's of class IX during summer vacation 2018 -19

ENGLISH

1. Make 20 word-meaning placards.(find words from beehive)
2. Project-Research on the topic 'Technological Advancement' and prepare a file & presentation to be presented in the classroom.
3. Read thoroughly and write answers of textual questions in your notebook of-
 - 1.U-3 The Little girl(Beehive)
 - 2.U-2 In the kingdom of fools(moments)

HINDI

निम्नलिखित प्रश्नों के उत्तर निर्देशानुसार लिखिए:

- 'जल संरक्षण' के उपायों से संबंधित एक विज्ञापन तैयार कीजिए।
- 'पानी' शब्द से जुड़े पाँच मुहावरे लिखकर वाक्यों में प्रयोग कीजिए।
- 'मृदा-संरक्षण' से संबंधित एक स्लोगन लिखिए।
- 'देश की प्रगति में युवाओं की भूमिका' तथा 'विद्यार्थी और अनुशासन' विषयों पर 100शब्दों में अनुच्छेद लिखिए।
- किसी एक भारतीय वैज्ञानिक से संबंधित जानकारी एकत्र कर चित्रों सहित एक अलबम तैयार कीजिए।
- 'जीवन केवल सुखों की राह नहीं' विषय पर आधारित पिता और पुत्र का संवाद लिखिए।
- वृक्षारोपण हेतु निकलने वाली रैली में शामिल होने के लिए अपने मित्र को पत्र लिखिए।

विशेष निर्देश :

- पाठ्यक्रम का अभ्यास करें।

MATHS

Do 3 Questions on the each type of the following.

Q1. Rationalization.e.g $\frac{2}{49-4\sqrt{3}}$

Q2. Find the value of a and b

e.g $\frac{5+\sqrt{27}}{7+\sqrt{48}} = a+b\sqrt{2}$.

Q3. If $x = 2+\sqrt{3}$, then Find the value of $x+1$, $\sqrt{x+1}$ & x^2+1
 $x\sqrt{x}$ x^2

Q4. Find the factors of cubic polynomial using long division method.

Q5. Plot different order pair on the graph paper. Name the quadrant in which they lie.

Q6. Using laws of Exponent.Do-3.Question.of the type

If $2^x = 3^y = 12^z$, Show that

$\frac{1}{x} = \frac{2}{y} + \frac{1}{z}$,

1. Activity: - Draw spiral of $\sqrt{2}, \sqrt{3} \dots \dots \dots \sqrt{11}$
2. Activity:- Sum of Angles of (a) A Triangle (b) A Quadrilateral
3. Activity: - To show, using paper cutting, pasting activity, that area of circle is half the product of its circumference and radius.



PHYSICS

1. ACTIVITY:

a. Find out the distance of your school/ any place from your home. When you go to school/any place from your house, note down the time you take. Calculate the average speed at which you go to school/any place. Prepare a chart showing average speeds while you are moving by:

- | | | |
|----------------------|------------|---------------|
| (a) Pedestrian | (b) a bus | (c) a bicycle |
| (d) a scooter/a bike | (e) a car. | |

b. Spend a day in an amusement park and indicate all the forces you experience. Indicate the forces involved while taking part in the following events:

- | | | |
|---|-------------------------|------------------------|
| (a) Cycle racing | (b) Sea – saw | (c) Knocking the stump |
| (d) Firing the balloons with a toy gun. | (e) Catching iron fish. | |

2. **Derive (Graphically):**
- | | | |
|-----|-------|------------------------------|
| | (i) | Position – Time Relation |
| | (ii) | Position – Velocity Relation |
| and | (iii) | Velocity – Time Relation |
3. State Newton's Laws of Motion with minimum two example each.
4. Solve at least 20 Numerical from following Chapters:
- | | | | |
|-----|--------|-----|---------------------------|
| (a) | Motion | (b) | Force and Laws of Motion. |
|-----|--------|-----|---------------------------|

CHEMISTRY

Chapter covered:

1. Matter in our surroundings

Q1:- On suffering from high fever, which will lower your body temperature more-ice or cold water? Give reason for your answer.

Q2:- Explain the interconversion of three states of matter in terms of force of attraction and kinetic energy of the molecules.

Q3:- State one similarity and two differences between boiling and evaporation.

Q4:- Describe an activity to show that particles of matter have spaces between them.

Q5:- List any two properties of liquids which are common to gases.

Q5:- Why does a gas fill completely the vessel in which it is kept?

Q6:- Suggest a method to liquefy atmospheric gases.

Q7:- Convert the following temperatures to Celsius scale:-

a) 453k b) 273k c) 527k d) 25k

Q8:- Sponge is a solid and still we are able to compress it. Why?

Q9:- Which characteristic of a gas is used in supplying oxygen cylinders to hospitals?

Q10:- Draw a diagram to show the arrangement of particles in a solid, liquid and a gas.

Q11:- Draw a flow diagram showing the interconversion of states of matter. Label the diagram completely.

Q12:- Why do we sprinkle water on the roof or open ground in summer?

Q13:- Why do surgeons often spray some ether on skin before performing minor surgery?

Q14:- When a player gets injured during a game, ethyl chloride is sprayed on the injured portion. Why?

Q15:- Why is ice rubbed on a burnt part of the skin?

Activity:-

1. Prepare a model to demonstrate movement of particles in solids, liquids and gases.

2. Design a small-scale filtration plant that you could use to clean muddy water by using pebbles, sand, earthen pot .

Biology

Chapter covered:

1. The fundamental unit of life

Q1:- What are the different kinds of plastids? Write their functions.

Q2:- What is the importance of vacuoles in a cell?

Q3:- Why does the skin of your fingers shrink when you wash clothes for a long time?

Q4:- A person takes concentrated solution of salt, after sometime, he starts vomiting. What is the phenomenon responsible for such situation? Explain.

Q5:- If you are provided with some vegetables to cook. You generally add salt into the vegetables during cooking process. After adding salt, vegetables release water. What mechanism is responsible for this?

Q6:- What happens to R.B.Cs when they are placed in

- (i) Hypotonic solution (ii) hypertonic solution (iii) isotonic solution

Q7:- Why are chloroplasts commonly called 'kitchen of the cell'?

Q8:- Draw a labeled diagram of mitochondrion in section?

Q9:- Differentiate between rough and smooth endoplasmic reticulum.

Q10:- Do you agree that "A cell is a building unit of an organism ".If yes, explain why?

Activity:-

1. Make a model:-
 - a) Animal cell (roll no. 1-8)
 - b) Plant cell (roll no. 9-16)
 - c) Compound microscope (roll no.17-24)

SOCIAL STUDIES

MAP WORK (Compile it in a clear bag)

Subject - History

Chapter-1: The French Revolution

Outline map of France (For locating and labelling/Identification)

- Bordeaux
- Nantes
- Paris
- Marseilles

Chapter-2: Socialism in Europe and the Russian Revolution

Outline map of World (For locating and labelling/Identification)

- Major countries of First World War: (Central Powers and Allied Powers); Central Powers - Germany, Austria-Hungary, Turkey (Ottoman Empire); Allied Powers - France, England, (Russia), America

Chapter-3: Nazism and the Rise of Hitler

Outline map of World (For locating and labelling/Identification)

- Major countries of Second World War: Axis Powers – Germany, Italy, Japan; Allied Powers – UK, France, Former USSR, USA
- Territories under German expansion (Nazi power): Austria, Poland, Czechoslovakia (only Slovakia shown in the map), Denmark, Lithuania, France, Belgium

Subject - Geography

CH-1 : INDIA-SIZE AND LOCATION

India - States with Capitals, Tropic of Cancer, Standard Meridian, Southern most, northern most, eastern most and western most point of India (Location and Labelling)

CH-2 : PHYSICAL FEATURES OF INDIA

- Mountain Ranges: The Karakoram, The Zasker, The Shivalik, The Aravali, The Vindhya, The Satpura, Western & Eastern Ghats
- Mountain Peaks: K2, KanchanJunga, AnaiMudi
- Plateau: Deccan Plateau, Chotta Nagpur Plateau, Malwa plateau
- Coastal Plains: Konkan, Malabar, Coromandal & Northern Circar (Location and Labelling)

CH-3 : DRAINAGE

Rivers: (Identification only)

- a) The Himalayan River Systems-The Indus, The Ganges, and The Satluj
- b) The Peninsular rivers-The Narmada, The Tapi, The Kaveri, The Krishna, The Godavari, The Mahanadi

Lakes: Wular, Pulicat, Sambhar, Chilika, Vembanad, Kolleru

CH-4 : CLIMATE

- 1. Cities to locate : Tiruvananthpuram, Chennai, Jodhpur, Bangalore, Mumbai, Kolkata, Leh, Shillong, Delhi, Nagpur. (Location and Labelling)
- 2. Areas receiving rainfall less than 20 cm and over 400 cm (Identification only)

CH-5 : NATURAL VEGETATION AND WILD LIFE

- Vegetation Type: Tropical Evergreen Forest, Tropical Deciduous Forest, Thorn Forest, Montane Forests and Mangrove For identification only
- National Parks: Corbett, Kaziranga, Ranthambor, Shivpuri, Kanha, Simlipal & Manas
- Bird Sanctuaries: Bharatpur and Ranganthitoo
- Wild life Sanctuaries: Sariska, Mudumalai, Rajaji, Dachigam (Location and Labelling)

CH-6 : POPULATION (location and labelling)

- The state having highest and lowest density of population
- The state having highest and lowest sex ratio
- Largest and smallest state according to area

1) Read the following chapters

- i) **The socialism in Europe and the Russian revolution.**
- ii) **Poverty**

2) Make a project file in any one of the natural disaster including causes effects and preventive measures.

- 3) Write few lines to show what do you know about Kulaks, Duma, women workers between 1900-1930, the liberals, Stalin's collectivization.(Ch. 2 Socialism in Europe and Russian revolution.)
- 4) Revision of the chapter completed till 28TH May 2018.