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PATHANAMTHITTA

SUMMER CHALLENGE 2020-21
CLASS IX

Dear Parents,

Summer vacation is here. There are plenty of productive ways a child can spend the vacation which can be fun, relaxing and helpful for his/her education. We wish to imbibe in our students the willingness to spend their summer vacation well; making optimum utilisation of time, following their passion and also at the same time enhancing their knowledge.

Like previous years, we have prepared the holiday homework to bridge the gap between academic years and to keep children engaged in creative and learning exercises during the holidays. Please ensure that the children do not finish assignments in bulk at a time. Let them do it at intervals spending few hours a week.

During the holidays, encourage the children to speak in English. Motivate your child to read newspapers as it not only enhances the child's knowledge about the world but also shapes his reading and writing skills as well as grammar.

During this difficult time of Corona virus disease, mental wellbeing of our children is a matter of top priority to us. Hence for guiding and counselling the students we have created a dedicated email id kvadooracademichelp@gmail.com. You may share your apprehensions and problems through this id.

We wish your ward a very rejuvenating vacation and seeking your cooperation in all our endeavours as always.

ENGLISH

ASSIGNMENT 1

Read the chapter 1 of BEEHIVE and based on it, prepare a debate where you speak for/ against the topic: Human teachers are much better than mechanical teachers. You can argue for the topic or against the topic.

ASSIGNMENT 2.

Write a diary entry on how lock down has snatched away your vacation period and yet how important it is to remain at home and follow government rules. Conclude what valuable lessons of life you understood and how it changed you from a mere human being to "Being Human"

ASSIGNMENT 3

Read chapter 1 from the supplementary THE LOST CHILD and write the questions and answers based on it.

Find more information about Mulk Raj Anand and his literary contributions.

HINDI

1) निम्नलिखित विषयों पर निबंध लिखिए

क) इक्कीसवीं सदी का भारत ख)पर्यावरण प्रदूषण ग)विद्यालयों में अनुशासन की आवश्यकता

2) बढ़ती महंगाई पर अपने विचार प्रकट करते हुए किसी प्रतिष्ठित समाचार पत्र के संपादक को पत्र लिखिए ।   OR

दिन-प्रतिदिन बढ़ते बिजली संकट की ओर ध्यान आकर्षित करते हुए दैनिक समाचार पत्र के संपादक को पत्र लिखिए ।

3) काशी विद्यापीठ द्वारा चलाये गए साहित्य और काव्य गोष्ठी में भाग लेकर आपके मित्र ने प्रथम स्थान पाया । इस अवसर पर उसे बधाई पत्र लिखिए ।

4) वाला, इक ,ई, इत ,तम प्रत्यय जोड़कर दो ंदो शब्द बनाइये ।

   सु, वि, परा ,सं,अप उपसर्ग जोड़कर दो दो शब्द बनाइये ।

5) निर्गुण भक्त कवि कबीरदास का सामान्य परिचय देते हुए उनकी कोई 10 साखियाँ इकट्ठा कीजिए । (A 4 paper या scrap book)

SANSKRIT

A4 SIZE PAPER

1) निबन्धलेखनम् - मम विद्यालय:

मम प्रियं पुस्तकम्

संस्कृत भाषाया: महत्वम्

2) सुभाषित संग्रह: (पञ्चविंशति: 25) अर्थ सहितम्

3) पञ्च चित्राणि दृष्टवा प्रत्येकं चित्रस्य कृते पञ्च संस्कृत वाक्यानि लिखत।

Home work book

1विलोमपदानां , पर्यायवाचि शब्दानां च संग्रह:(work book page number146-148)

2 शब्दरूपाणां लेखनं पठनं च (बालक, बालिका, पुष्प ,नदी ,भानु , हरि ,पितृ ,मातृ)

3 धातुरूपाणां लेखनं पठनं च (पठ् , लिख् ,चल् , धातूनां पञ्च लकारे रूपाणि)

(120 page class work note book &120 page home work note book)

MATHS

1. Plot the following points on a graph sheet and join them. Find the area of the figure formed by joining these points

    a) (1,0) , (4,0) and (1,5)

    b) (5,3) ,(9,3) ,(5,8) and (9,8)

2. Factorize the following

    a) $(3x + 5y)^2$ -$4z^2$

    b) $y^2 + 11y + 30$

    c) p^2 -4p +3

    d) $2y^2$ -22y- 160

    e) $4y^2 + 12y$ +5

3. Write and learn

    a) The algebraic identities you have learned

    b) Formulae for finding the area of rectangle, square, triangle, parallelogram, circle, trapezium and rhombus.

    c) Formulae for finding the surface area and volume of cube, cuboid and cylinder

4. Construct (using ruler and compasses) angles of measure

    a)30^0 b)90^0, c) 75^0, d)$105^0$and 150^0

5. Make a double bar graph of a data collected from media (newspaper,TV….etc.). What are the conclusions you are making out of it?

SCIENCE

REACHING THE AGE OF ADOLESCENCE

Fill in the blanks :

1.The period of life, when the body undergoes changes, leading to reproductive maturity is called_____.

2.The age at which reproductive organs become functionally active is called

_____.

3.Increase in height occurs during_____.

4._____are external characters which are directly not involved in the process of reproduction.

5.The changes which occur during adolescence are controlled by

_____.

6.The hormones are produced in special organ are called

_____.

7.Endocrine glands are also called_____glands.

8.In frog metamorphosis is controlled by_____hormone.

Answer the following :

1. Name the sex hormone in humans.
2. Name the disease caused due to deficiency of the hormone thyroxine.
3. Name the hormone produced by the adrenal gland.
4. Name the master gland.
5. What are the type of sex hormones produced by males ?
6. How many pairs of chromosomes as human body cell contain ?

Materials : Metals and Non-Metals

1. Following diagrams explain which Properties of metals .

    Beating iron nail with hammer   Passing electricity through any

                                                                    Material

    ....

2. Complete the following table

Material	Conductor/Insulator
Aluminilum Wire	
Wood	
Rubber	
Pencil lead	
Salt Solution	

3. Which gas burns with a pop sound

    a)   Hydrogen   b)   Nitrogen
    c)   Oxygen   d)   Carbondioxide

4. The property of metals, due to which they can drawn into wires.
    a)   Conductance   b)   Sonorous
    c)   Ductility   d)   Malleability

5.	Nature of metal oxide is :
	a)	Basic ☐	b)	Acidic ☐
	c)	Neutral ☐	d)	None of these ☐

6.	Non- metal, solution of which is used as an antiseptic on wounds.
	a)	Potassium Dichromate ☐	b)	Potassium permanganate ☐
	c)	Sodium chloride ☐	d)	Copper Sulphate ☐

7.	Name the following type of reaction :-
	Copper sulphate ($CuSo_4$) + Zinc (Zn) = Zinc Sulphate ($Znso_4$) + Cu (Copper)
	_____(Displacement / addition)

8.	Write any three differences between metals and non-metals on the basis of following characters -

	Property	Metal	Non-Metal
1)	Appearance	_____	_____
2)	Conduction of heat	_____	_____
3)	Malleability	_____	_____
4)	Ductility	_____	_____

	Write one word for the following :
i)	Materials having properties of both metals and non-metals_____.
ii)	The property of metals due to which they produce sound_____.
iii)	The property of metals due to which they can be beaten into sheets_____.
iv)	Nature of metal oxides is_____.
v)	The property of metals by virtue of which they can be drawn into wires_____.

SOUND

Fill in the blanks :

1. Time taken by an object to complete one oscillation is called_____.

2. Loudness is determined by the_____of vibration.

3. The unit of frequency is_____.

4. Unwanted sound is called_____.

5. Shrillness of a sound is determined by the_____.

6. The number of oscillation in one second is called_____.

7. The hearing range of human ear is _____

8. Sound cannot travel in _____.

9. Sound can travel in_____.

10. The pitch of sound depends on_____.

Choose the correct answer :

1. Ear drum is a part of_____[sound producing organ or hearing organ]

2. The voice box is also called_____[Larynx / mouth]

3. Large amplitude of sound vibrations will produce ___[Loud sound / slow sound]

4. Voice of which of following is likely to have minimum frequency
_____[Baby girl / A woman]

5. The unit of loudness is_____(decibel / Hertz)

Answer the following :

1.   Name the sound producing organ in human.

2.   How does sound travel from one place to another ?

3.   How is sound produced ?

4.   What do you mean by musical sound ?
5.   How does the amplitude affect the loudness of vibration?

6.   What is noise pollution?

7.   What is outer part of ear is called ?

8.   What are the two main properties of a sound.

9.   Which help us to recognize sound?

10. On which factors loudness of sound depend?

11. What is infrasonic vibration? What is their range in Hertz?

L-13
Sound

1. Identify the part in the following musical instruments which is responsible for producing sound :
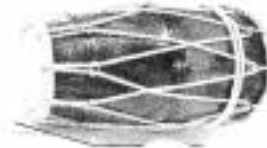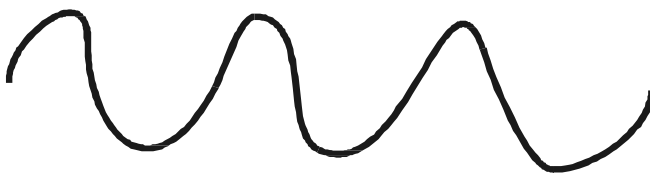

EKTARA

TABLA
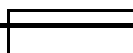

FLUTE

DHOLAK

SITAR

HARMONIUM

2. Fill in the blanks :-

a) In human beings, sound is produced by_____.

b) Sound needs any medium to travel, it cannot pass through_____.

c) No of oscillations per second is called_____.

d) The audible range of frequency is_____.

3. Which sound out of the following two is a noise.

a)

b)

Ans. _____.

4.   Which sound out of the following two is shriller.

a)

b)

Ans. _____

5.   Identify the high -pitched sound ---------
a)   Sound of a drum   b)   Sound of a whistle
Ans. _____
b)   Chirping of a bird   b)   Roar of a lion
Ans. _____

6.   Identify the high - frequency sound
a)   Voice of a child   b)   Voice of an adult
Ans. _____
b)   Female voice   b)   Male voice
Ans. _____

7.   Label it .

                    Human ear

8.   Mention any two measures to limit noise pollution.
a.   ....
b.   ....

SYNTHETIC FIBRES AND PLANT

Fill up the blanks :

1.   Fibres we get from plant and animals are called_____.

2.   Artificial fibres are commonly called_____.

3.   The simple molecule of molecule in a polymer is called_____.

4.   The polymer of natural fibre cotton is called_____.

5.   The material which can easily be molded is called_____.

6.   The process by which artificial fibres are made from simple fibre is
       called_____.

7.   The raw material used for the production of rayon is_____.

8.   _____is made by the polymerisatin of amide molecules.

9.   Terylene is obtained by the polymerising the molecule of _____

       and_____.

10.   Acrylic fibre is obtained by the polymerisation of molecules of_____.

11.   Koroseal is the trade name of_____.

12.   PVC stands for_____.

13.   PET stands for_____.

14.   _____prepared by the polymerization of vinyl chloride
       molecules.

15.   Two examples of thermoplastic.

16.   Two examples thermosetting plastic.

17.   The materials which get decomposed through natural process such as
       the action of bacteria are called_____.

18.   Name any three synthetic fibres.

19.   Write two uses of - RAYON, NYLON, TERYLENE, ACRYLIC FIBRE,
       KEROSEAL

20.   Define Non Biodegradable.

BIOLOGY - THE CELL

1. Basic structural units of living organisms are _____

2. Three ways in which cells differ are_____,_____and

3. Largest animal cell is _____

4. Name 2 cells which change shape continuously_____,

5. Smallest cell is _____

6. A unicellular Algae _____

7. An egg consists_____, _____

8. Long and branched cell in human body is _____

9. 3 basic cell parts are_____,_____and

10. Animal Cell is bounded by _____

11. Outer layer in plant cell is _____

12. Function of cell membrane and cell wall- _____

13. Suicide bags of the cell._____

14. Boss of the cell is _____

15. Power house of the cell is _____

16. Chloroplasts are found only in _____

17. Protoplasm which is between nucleus and plasma membrane is

18. Non-Living component of the cell wall._____

19. Instrument used in biology lab to magnify objects_____

20. Cells lacking nuclear membrane are (Prokaryotic cells/ Eukaryotic cells)

FORCE AND PRESSURE

1. S.I unit of pressure is_____.
2. The amount or the strength of force is called its_____.
3. Pressure in solid depends upon_____and_____.
4. Pressure in liquids depends upon_____and_____.
5. Force generated by moving of non living materials is called_____.
6. Give 2 examples of contact forces.
7. Name the scientist who invented a pump to extract air from a   vessel.
8. Name the force which acts upon another body without any   connector.
9. Name the type of force involved in the following.

   a) To pick your school bag.   b) To collect scrap iron from garbage.

   c) To push or pull a loaded trolley ay supermarket.

   d) Flying of seeds away from each other in plastic bag when gently   rubbed.

10. Name the device used to measure pressure in fluids.
11. How much force is required to lift a mass of 1Kg (10N/1N).
12. A rolling ball stops after sometime due to (gravitational force/   Frictional force).
13. When 2 forces are applied at the same point but in opposite directions the net force is equal to the (sum/ difference) of forces   acting separately.

14. Force used to stretch the spring is (muscular force/ magnetic force)
15. Application of force brings the change in

a)   shape and size of object   (b)speed and direction of object   (c) position of object   (d) all the above

SOCIAL SCIENCE

Read First two chapters of each book of social science. Prepare fill in the blanks or multiple-choice questions with answer each from the following chapters.

1) HISTORY - India and the contemporary world -1

2) GEOGRAPHY- Contemporary India-1

3) Economics

4) Political Science - Democratic Politics-1

* Map Skill

   {a} World Map

         20 Rivers,   10 Mountain Ranges,   20 Lakes,   20 Countries and its Capital

   {b} Map of India

         Important Rivers,   Natural Vegetation,   Mountain Ranges

*Role of students in school and society during the time of disaster/Natural calamity.

NOTE :   Holiday Homework is to be done in Practical File.

               Take help from your text book.

ART

Design the cover page of any story book that you have read on A4 size paper – draw and colour. Make sure to rite the name of the book in Capital letters and authors name in any type of calligraphy.

The designing can be done in three ways

1. Copy the cover design as it is
2. Make a few changes to the existing design so that it is partially your idea.
3. A completely original idea of the cover page of the book that you have read.