



KĀSIGA SCHOOL
DEHRADUN

Holiday Homework Summer Break 2020



HOLIDAY HOMEWORK GRADE 9

ENGLISH

English Week!

Brace yourself up for the upcoming English week after the school reopens.

General Instructions

1. Everyone has to participate. This is a mandatory activity.
2. Put your sincere efforts and awaken the creativity!
3. The marks will be added to your year-end assessment as a part of your speaking skills.

Activity	Instructions	References
Declamation	<ol style="list-style-type: none">1. Select a respectable person. Do your research. Record your declamation in 60- 90 secs.2. Dress up if possible.3. After the prelims, the selected participants will move to the next stage.4. 3 Winners. Two consolation prizes.5. You will be marked for content, delivery, body-language and pronunciation.6. I should receive all recorded entries by 28.06.2020. Send it to me on Teams or may mail- kpriyanka@kasigaschool.com <p>Eg: Mother Teresa, Barrack Obama, Malala, Martin Luther King, and Mahatma Gandhi etc.</p>	<p>Declamation</p> <p>Character- Indira Gandhi</p> <p>https://www.youtube.com/watch?v=kiyHW17gkfU</p> <p>Character- Martin Luther King</p> <p>https://www.youtube.com/watch?v=xRjN5i8D6oc</p>
Project	Instructions	
Create your own Newspaper	<ol style="list-style-type: none">1. A four page digital newspaper set in the year (2157). You can create it for the date (dd/mm//yyyy) of your choice.2. Have sections like- International, National, Entertainment, sports, etc.3. Be creative in your design, theme, and language.4. The newspaper must have a title.5. Keep it original!6. It can be a ppt or pdf file. Your choice7. I should receive your work by 1.07.2020.8. Full Marks- 109. This is a mandatory part of your year-end assessment.10. Send me on your work on Teams or my mail-kpriyanka@kasigaschool.com	

HINDI
ग्रीष्मावकाश कार्य 2020-21

- वन्य जीवों की समस्याओं का वर्णन करते हुए उस घटना पर अपने विचार लिखिए और बताइये कि हाथी को विस्फोटक खिलाना कहाँ तक उचित था ?
- अपनी पसंद के किन्हीं पांच विषयों पर पांच-पांच मुहावरों के प्रयोग के साथ अनुच्छेद लिखिए।
- जनकल्याण विभाग के नारों को एकत्र कीजिये और कोलाज़ बनाकर प्रस्तुत कीजिये **[[नोट के अखबार हिंदी : हैं अनिवार्य ही विज्ञापन।]**
- मुंशी प्रेमचंद की कहानी 'बूढ़ी काकी'कफ़न' कहानी की समानताओं को अपने शब्दों में लिखिए।



Holiday Homework

Subject : Mathematics



Class: 9A

1. Value of $0.\overline{3}$ is

- a. $\frac{1}{3}$
- b. $\frac{1}{6}$
- c. $\frac{1}{9}$
- d. $\frac{1}{2}$

2. Which of the following is terminating decimal?

- a. $\frac{1}{80}$
- b. $\frac{1}{3}$
- c. $\frac{1}{35}$
- d. $\frac{1}{60}$

3. Which of the following is irrational

- a. 14
- b. $0.\overline{14}$
- c. $0.\overline{34}$
- d. 0.12342452.....

4. Decimal representation of an irrational number is

- a. Always a terminating decimal
- b. Either a terminating or a repeating decimal
- c. Either a terminating or a non repeating decimal.
- d. Always non-terminating and non –terminating decimal.

5. If $\frac{(\sqrt{3}-1)}{(\sqrt{3}+1)} = a - b\sqrt{3}$ then value of a and b are

- a. 2, 3
- b. 2, 1
- c. 1, 4
- d. 3, 2

6. Value of $((81)^{-2})^{\frac{1}{4}}$ is

- a. 2
- b. 3

- c. $\frac{1}{3}$
- d. $\frac{1}{9}$

7. If $x = (4 - \sqrt{15})$ the value of $\left(x + \frac{1}{x}\right)$ is

- a. 4
- b. 8
- c. 15
- d. 4

8. If $x = (2 + \sqrt{3})$ the value of $\left(x^2 + \frac{1}{x^2}\right)$ is

- a. 12
- b. 13
- c. 14
- d. 15

9. If $(x^3 + ax^2 + bx + 6)$ has $(x - 2)$ as a factor and leaves a remainder 3 when divided by $(x - 3)$, find the value of a and b .

10. Find the value of a and b so that the polynomial $(x^3 - 10x^2 + ax + b)$ is exactly divisible by $(x - 1)$ and $(x - 2)$ both.

11. Factorise:

- a) $x(a - 5) + y(5 - x)$
- b) $(2x - 3)^2 - 8x + 12$
- c) $8ab^2 - 18a^3$
- d) $X^4 - 625$
- e) $X^2 + 11x + 30$
- f) $X^2 - 21x + 108$
- g) $8a^3 - 27b^3$

12. Expand:

- a) $\left(3a + \frac{1}{4b}\right)^3$
- b) $\left(\frac{4x}{5} - 2\right)^3$

SCIENCE

PHYSICS

TOPIC: MOTION

1. How will the equations of motion changes for an object moving with a constant velocity?
2. What is the displacement and distance covered by the car which moves in a circular road of radius R when it covers half the circle?
3. What is the velocity vs time graph of an object when it moves with uniform positive acceleration?
4. A particle is moving in a circle of diameter 20 m. What is its distance and as per the table given below

S.no	Rounds	Displacement	Distance
1	1		
2	1.5		
3	2		
4	2.5		

5. A body moves over a horizontal surface with an initial velocity of 2 m/s. Due to friction its velocity decreases uniformly at rate of 0.75 ms^{-2} . How much time will it take to stop?
6. A car has a uniform acceleration of 2.5 ms^{-2} . Calculate the distance travelled by the car after 10 seconds of start?
7. A bus is travelling at a speed of 72 km/h, the brakes are applied so as to produce a uniform retardation of 1.2 ms^{-2} . Find the distance it travels after applying brakes so that it completely stops?
8. A particle travels with an initial velocity of +6.0 m/s and moves with an acceleration of -2.0 m/s^2 . Calculate the displacement of the particle after 5 seconds?
9. An object moves along a straight line with an acceleration of 1.5 ms^{-2} . If its initial speed is 10 m/s, find its speed after 5 s?
10. What is acceleration write it's unit?
11. A ball is thrown upwards and it goes to the height 100 m and comes down
i) what is the net displacement? ii) What is the net distance?
12. A body moving in a circular path with constant speed. Is it accelerating? Explain if so?
13. A body goes from point A to B and then return then from B to A. what is the total displacement?
14. Acceleration is a vector quantity True or false?
15. What is the path of a velocity –time graph of a body moving with uniform acceleration?
16. What all ways the velocity of the body can be changed?
17. What is average speed?

18. Match the column

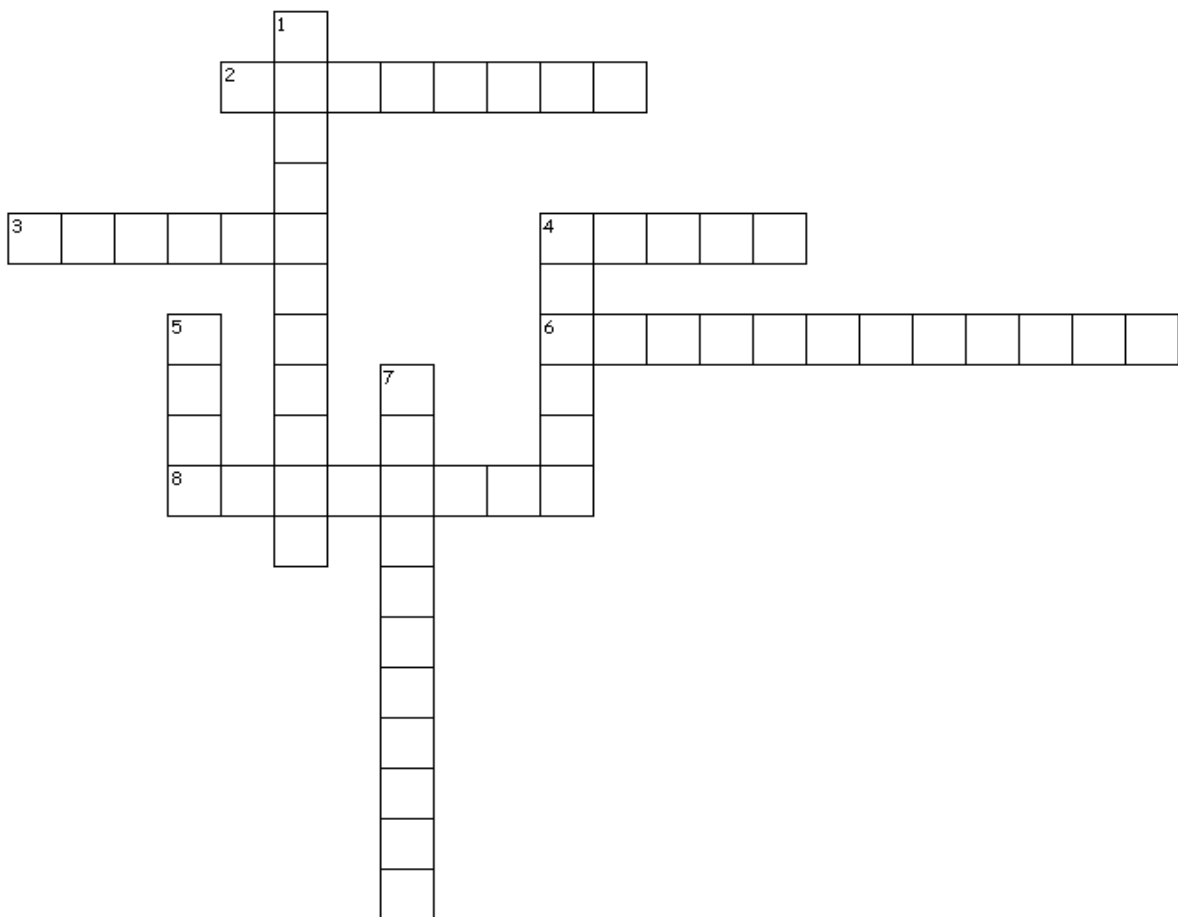
column A	Column B
The Slope of the speed-time graph is called	Average Velocity
The arithmetic mean of initial and final velocity	distance
What quantity is obtained by the area under speed time graph	acceleration
The slope of the distance time graph	speed

19. Table type question

A car moves in a straight line from rest at $t=0$. It accelerates with 2ms^{-2} . Solve the following table

Time	2 sec	?	?	10 min
Displacement	?	?	25 m	?
Velocity	?	10 m/s	?	?

20. Crossword Puzzle



Across

2. Physical quantity obtained by dividing displacement with time taken
3. A quantity having both magnitude and direction
4. This remains constant in uniform circular motion
6. It is the slope of speed -time graph
8. This measure the distance travelled by the car

Down

1. This is the other name for negative acceleration
4. The speed is said to be a
5. This is the acceleration of the body with uniform velocity
7. This measure the speed of the car

CHEMISTRY

INSTRUCTIONS-

All work do be done neatly in a copy. Only handwritten work will be accepted.

Q 1. Why are gases so easily compressible whereas it is almost impossible to compress a solid or liquid?

Q 2 Why do gases have neither a fixed shape nor a fixed volume?

Q 3) Give reasons for the following

a) Milk is called a liquid.

b) Carbon-di- oxide is a gas.

Q 4) a) Which characteristic of a gas is used in supplying oxygen cylinders to hospitals

b) How does the smell of the cooked food reach our nostrils even without entering the kitchen?

c) Explain why when sugar crystals dissolve in water the level of water does not rise appreciable.

Q 5) Define evaporation? State the factors on which it depends.

Q 6 Compare the properties of solids, liquids, and gases in a tabular form.

Q 7) State one example each of i) Diffusion of liquids into liquids ii) Diffusion of gases into liquids

Q 8) Describe an activity to demonstrate that particles of matter are constantly moving.

Q 9) Give reasons : a) A gas fills completely the vessel in which it is kept b) A gas exerts pressure on the walls of container c) A wooden table should be called a solid.

Q 10) What are the characteristics of particles of matter?

Q11) Write the symbols of the following elements-

Sodium , Potassium , Zinc, Hydrogen, Helium, Lithium, Chlorine, Oxygen, Magnesium, Carbon, Nitrogen, Magnesium , Calcium.

Q12) Draw a diagram to show interconversion of matter.

BIOLOGY

Grade IX

Theme: Why Do We Fall Ill

- Link 1: <https://www.youtube.com/watch?v=2JWku3Kjpp0> (Infectious Diseases - How do we control them?)
- Link 2: <https://www.youtube.com/watch?v=vO51sFre6fg> (How are pathogens spread and controlled)
- Link 3: <https://www.youtube.com/watch?v=D9tTi-CDjDU> (What is a coronavirus?)

Watch the above links, refer to your textbook and other resources from the internet and make a Powerpoint presentation. Your presentation should include the following:

- How different modes of transmission cause different diseases.
- Make a table of the different kinds of diseases, their mode of transmission and their symptoms.
- What kinds of diseases can be prevented by practicing hand-washing?
- Explain how the virus can be spread.
- Explain the preventive measure for COVID-19.
- What can you do as an individual to avoid the spread of COVID-19?
- Read your textbook and other resources from the internet to explain some of the myths associated with the spread of diseases such as HIV, Tuberculosis, vaccination, COVID-19, etc. Make your own poster about the myths associated with COVID-19

SOCIAL STUDIES

SUMMER HOLIDAY HOMEWORK - CLASS IX

SOCIAL SCIENCE PROJECT- DISASTER MANAGEMENT

“RISING SEA LEVELS, SEVERE DRAUGHTS, THE MELTING OF THE POLAR CAPS, THE MORE FREQUENT AND DEVASTATING NATURAL DISASTERS ALL RAISE DEMAND FOR HUMANITARIAN ASSISTANCE AND DISASTER RELIEF.”

Natural Disaster is a natural event which causes great damage to environment and loss of life. For example: Earthquakes; Volcanoes; Cyclones; Wildfires to name a few.

Disaster Management is careful planning and dealing with Natural Disasters in a particular place. India has been facing a lot of such disasters over the past year

Keeping the above statement in mind, prepare a project on **DISASTER MANAGEMENT** as per the following guidelines:

1. Highlight the following:

- a. Differentiate between Hazard & Disaster.
- b. What is meant by Disaster management cycle?

2. Complete the following table with the relevant information:

HAZARD	EXAMPLES
PHYSICAL	
CHEMICAL	
BIOLOGICAL	
MAN-MADE	

3. **RESEARCH WORK:**

a) You need to read about **CYCLONE AMPHAN** that affected Odisha and West Bengal in May 2020. Show the affected areas on a political map of India.

b) Answer the following questions:

- What are the dates when Cyclone Amphan took place?

- Why did Cyclone Amphan happen (CAUSES)?
 - Write 5 severe EFFECTS of Cyclone Amphan.
 - What prevention measures did Government of India take to reduce the no. of deaths due to Cyclone Amphan
 - Describe 4 ways in which you can help the people suffering from Cyclone Amphan.
- c) Design an A4 size poster to raise funds/money to help the cyclone victims. (you can use computers to design this poster)

4. Being a student of science, you are familiar with your **school chemistry laboratory**. According to you what would be the **various hazards (at least 3)** you may face while working in the laboratory and how can they be prevented.

GENERAL INSTRUCTIONS:

1. The project should be hand written, well presented, researched and pictorial with neat map-work
3. Cover page, table of contents, acknowledgements, headings and sub—headings are a must.
4. Each section should be done on a white/coloured A4 size sheets.
5. The project should be presented in a file.
6. The project should be less than 10 pages.
7. Do not exceed 650-700 words.
8. The distribution of marks over different aspects relating to Project work is as a follows:
 - a. content accuracy, originality and analysis; Presentation and creativity and Viva.