



KĀSIGA SCHOOL
DEHRADUN

Holiday Homework Summer Break 2021



HOLIDAY HOMEWORK GRADE 9

ENGLISH

Project: Exploring the World Around Us

Make a small documentary style video using any camera and microphone or a presentation to discuss the importance and advancement in the field of study of your choice. Use resources at your disposal to explore your topic and take hints from pre existing documentaries to aid your project.

Important details:

- a) Report length: 5- 10 minutes
- b) Introduction of the topic chosen
- c) Perspectives of scholars and research going on in the area.
- d) Your perception and what did you learn from the project.
- e) A conclusion.

Reference topics

1. Life on Other Planets
2. Social Life of Plants
3. The Rich Diversity of Organisms on Earth
4. History of Mummification
5. Video Game Industry
6. History of Democracy
7. Diverse Cuisine and their designers
8. Chinese Mathematics
9. Nuclear Energy and Warfare
10. Social Media and Artificial Intelligence
11. Schools Across the Globe in Times of Pandemic
12. History of Programming Languages
13. Human Genome Project and Cloning
14. Five Greatest Inventions of the Millenium
15. Climate Change
16. Holocaust and the Tragic WW II
17. Cold War and the World Politics
18. Importance of Books and Cinema in 21st century
19. The World Conqueror: Alexander, the Great
20. Health and Sanitation: Comparing Sewage Processing in India and Around the World

HINDI

१ .दुःख का अधिकार अपनी कल्पना से नाटक | पाठ को संवाद शैली में परिणत कीजिये ' का अंतबदलने के लिये आप स्वतंत्र हैं |

२ कबीर दास की दस साखियों को संकलित कीजिये जो रहीम के दोहों की तरह आपको .
| मूल्य प्रदान करती हैं-जीवन

३ .'स्क्रीन के साए में सिसकता बचपन| विषय पर एक पीपीटी तैयार कीजिये '[न्यूनतम
१०स्लाइड्स [



Holiday Homework

Subject : Mathematics



Class: 9A

SCIENCE

PHYSICS

HOLIDAY HOMEWORK- PHYSICS

CLASS 9

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**

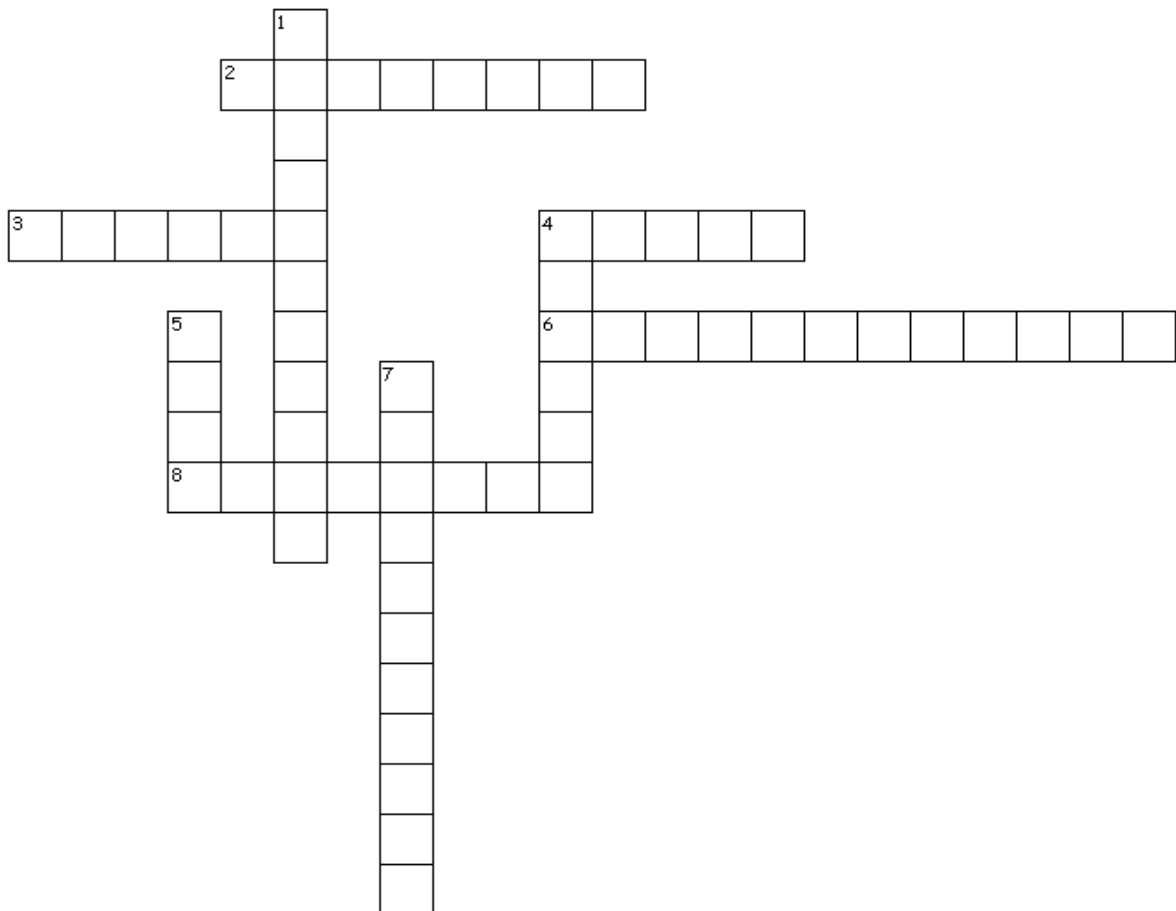
column A	Column B
The Slope of the speed-time graph is called	Average Velocity
The arithmetic mean of initial and final velocity	distance
What quantity is obtained by the area under speed time graph	acceleration
The slope of the distance time graph	speed

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-

- a. The given worksheet to be done in chemistry notebook.
 - b. All work to be submitted by 01.07.21 on MS Teams assignment or on the given email id-
rmathur@kasigaschool.com
 - c. This homework is a part of internal assessment and marks will be awarded for it.
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Q1. 5ml of water was taken in a test tube and china dish separately. These samples were then kept under different conditions as below Both the samples are kept under a fan Both the samples are kept inside a cupboard

- a) State in which case evaporation will be faster?
- b) Give reason : How will the rate of evaporation change if above activity is carried out on a rainy day?

Justify

Q 2. Explain how will you separate Ammonium chloride and common salt using sublimation

Q3. Write an activity to prove that liquids of different densities diffuse at different states.

Q4. All of us are familiar with LPG cooking gas cylinder used at home-

- a) What is the full form of L.P.G?
- b) What is it composed of?
- c) In what form gas is stored? What are the factors responsible for it?

d) What is the change observed when regulator is opened? Why?

Q4. Pressure on the surface of a gas is increased. What will happen to the inter particle forces?

Q5. A gas can exert pressure on the walls of the container. Give reason.

Q6. Convert the following temperature to Kelvin Scale- (a) 100°C(b) -100 °C

Q7. What is meant by density?

Q8. Give the characteristics of the particles of matter.

Q9. Water droplets seen on the outer surface of a glass containing ice-cold water .Name the process and state cause.

Q10. What is the difference between evaporation and boiling .

Q11. Define Latent heat of vaporization.

Q12. Explain why temperature remains constant during the change of state of any substance?

Q13. Define sublimation with examples.

Q14. Do we sweat more on a dry day or humid day? Justify your reason.

Q15. Why do we see water droplets on the outer surface of a glass containing ice cold water?

BIOLOGY

Theme: Why Do We Fall Ill

- Link 1: <https://www.youtube.com/watch?v=2JWku3KjppQ> (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

Make a project on any Disaster that might have happened in the past.

The project should include

- A description of the actual disaster
- The state of preparedness of the people to deal with the disaster.
- What was the response to the disaster. How soon did help reach the people?
- Mitigation measures before the disaster. Did it improve after the disaster?
- What measures were take to rehabilitate the people

You may also use present COVID situation (worldwide or in India) as the topic of your project or you may use some other natural disaster.

Your project needs to have adequate information, statistics, and pictures.

Your projects need to be organized in the following manner

1. Cover page with the Topic and your name
2. Acknowledgement
3. Content
4. Introduction
5. Body which may consist of several sub-topics and page
6. Your view And conclusion
7. Bibliography

MATHEMATICS

"Holiday home work will be uploaded in teams under assignments, kindly check there for the same."