

# Gurukul Montessori School

Holiday Homework 2023-24

Class 9<sup>th</sup>

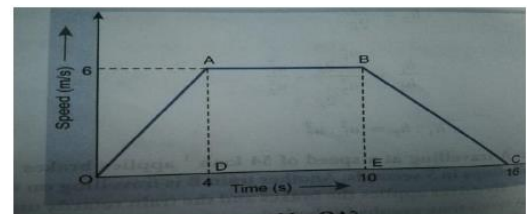
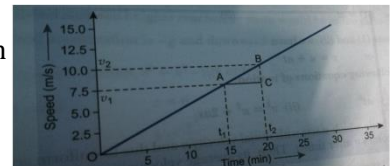
Subject : Biology

1. Prepare an investigatory project on Haemoglobins count of human being.
  - a. Visit a clinic and prepare a record of blood count of different group of people in age group of 10 to 60.
  - b. What will be the blood count of Haemoglobins in toddlers?
  - c. Comment upon the difference between blood count of male and female?
2. Prepare a model of any one cell organelles.

[Note-Do the written work in C.W copy of Biology]

## SUBJECT – PHYSICS

- 1 Give the definition of uniform and non uniform motion.
- 2 Distinguish between speed and velocity.
- 3 Give the definition of uniform and non uniform acceleration
- 4 Convert 80km/hour into m/sec
- 5 Convert 10m/sec into km/hour
- 6 Draw the following
  - (i) distance-time graphs for uniform and non uniform motion.
  - (ii) Velocity -time graph for uniform velocity
  - (iii) Velocity –time graph for uniform acceleration
- 7 Obtain the following equations of motion for constant acceleration using the graphical method  
(i)  $v=u+at$  (ii)  $s=ut+(1/2)at^2$  (iii)  $v^2=u^2+2as$  where  $u$  is initial velocity,  $v$  is final velocity and  $t$  is time,  $a$  is acceleration
- 8 A bus starting from rest moves with uniform acceleration of  $0.1\text{ m/s}^2$  for 2 minutes .Find
  - (i) the speed acquired (ii) the distance travelled.
- 9 A car has a uniform acceleration of  $4\text{ m/s}^2$ . What distance will it cover in 10 sec after start.
- 10 An artificial satellite is moving in a circular orbit of radius 42250 km. calculate its speed if it takes 24 hours to revolve around the earth.
- 11 Given below is the velocity –time graph for the motion of the car.  
What does the nature of the graph show? Also find the acceleration of the car.
- 12 Study the speed time graph of a body given here and answer the following questions
  - (i) What type of motion is represented by OA?
  - (ii) What type of motion represented by AB
  - (iii) What type of motion represented by BC
  - (iv) Find out the acceleration of the body.
  - (v) Calculate the retardation of the body.
  - (vi) Calculate the distance travelled by the body from A to B.



## Social science

History – Read the chapter one The french Revolution and do question answer from 1 to 3 of the chapter.

Geography – Read the chapter India size and location and do question answer from 2 to 4 .

Civics – Read the chapter what is democracy ? Why Democracy? and do all excersises of chapter.

Economics – Read the chapter The story of village palampur and do excersises of chapter.

Note – make a separate copy for Holiday home work .

1. दिए गए गृह कार्य को गृहकार्य की कॉपी में क्रमानुसार करें।
  2. प्रश्नों को ध्यानपूर्वक पढ़कर उत्तर लिखने की प्रक्रिया पर विशेष ध्यान दें।
- प्रश्न संख्या -1 दोनों विषयों पर दिए गए बिंदुओं के अनुसार अनुच्छेद लेखन करें-
1. महानगरीय जीवन
- संकेत : (क) महानगरों का जीवन
- (ख) उच्च वर्ग और मध्य वर्ग का जीवन
- (ग) महानगरों में रहने में आनेवाली समस्याएं
- (घ) महानगरों की सुविधाएं
- (च) महानगरीय जीवन का संघर्ष
2. 21वीं सदी का भारत
- (क) उपलब्धियों की ओर बढ़ते कदम (ख) कंप्यूटर का वृहद उपयोग
- (ग) निर्धनता एवं शिक्षा का निराकरण (घ) शिक्षा पद्धति में मूलभूत परिवर्तन
- (च) औद्योगिक क्रांति एवं सूचना प्रौद्योगिकी का उत्कर्ष काल
- (छ) चिकित्सा के क्षेत्र में विशेष उपलब्धियां
- (ज) परमाणुशक्ति संपन्न शांतिपूर्ण देश के रूप में प्रतिष्ठित राष्ट्र
- प्रश्न संख्या- 2 यात्रा वृत्तांत के आधार पर तिब्बत की भौगोलिक स्थिति का शब्द चित्र प्रस्तुत करें।
- प्रश्न संख्या -3 राहुल सांकृत्यायन द्वारा लिखित पाठ ल्हासा की ओर के सभी प्रश्न उत्तर कॉपी में लिखें।
- प्रश्न संख्या- 4 पत्र लेखन के प्रारूप पर प्रकाश डालते हुए क्रमशः 2 औपचारिक एवं एक अनौपचारिक पत्र विषय से संबंधित लिखें।
- प्रश्न संख्या- 5 विगत कक्षा में पढ़े हुए पाठ्यक्रम से दो अपठित गद्यांश एवं दो अपठित पद्यांश को पढ़कर गद्यांश / पद्यांश एवं उनके प्रश्नों के उत्तर को कॉपी में लिखें।
- प्रश्न संख्या -6 कबीरदास या प्रेमचंद में से किसी एक का A4 साइज पेपर पर चित्र बनाएं।

## Chemistry

Instructions- All the work should be done in a separate copy

- 1- To check the compressibility of states of matter and prepare a report on it.
- 2- What happens during a change of state inside the matter?
- 3- Why does a desert cool better on a hot dry day?
- 4- Why does our palm feel cold when we put some acetone or petrol Or petrol on it?
- 5- Give reasons for the following:-
  - I) Naphthalene balls disappear with time without leaving any solid.
  - II) Water at room temperature is a liquid.
- 6- Water as ice has a cooling effect whereas water as steam may cause severe burns. Explain the reason.
- 7- Why does the temperature of a substance remain constant during its melting point or boiling point?
- 8- Why is sponge compressible though is a solid?
- 9- Account for the following:-
  - I) the temperature of water remains constant during boiling.
  - Ii) evaporation is a surface phenomenon.
- 10- Give one similarity and one difference between evaporation and boiling.

**Subject : English**

Note : Homework should be done in separate copy.

1- Choose any 3 comprehension passage from E- practice book and solve it.

Q-2 Read the newspaper daily and make the collage of all international news in a thin register underlining it with the holiday homework.

Q-3 Imagine you are Onkar Verma. You are living at 70 Aadarsh nagar Jalandhar. Report to the police about the loss of your bicycle.

Q-4 One of your friends Raman is very gentle and polite to you. You regard him as your best friend . Describe him in 100-150 words.

**Maths**

1) Draw a square root spiral on chart paper.

2) Do chapter 1 and chapter 2 of R.S Agarwal in separate copy.