## DAV POLICE PUBLIC SCHOOL, JHAJJAR HOLIDAYS HOMEWORK Class - 9<sup>th</sup>

#### **English**

Dear students

Learning is the beginning of wealth.

Learning is the beginning of health.

Learning is the beginning of spirituality.

#### Searching and learning is where the miracle process all begins

#### Listening skill....

• Listen English news daily for 15 minutes

#### Speaking skill

Read lesson 1 to 3 of Beehive and Moments . Do practice speaking the difficult words in the lesson correctly to make your tongue habitual of the twist during speaking.

#### **Reading skill**

• Read English newspapers or story books of English.

#### Writing skill-

- Write story on the following topics:
- a) Complete the following story. It has to be a scary story that terrifies people. Give a suitable title to your story.

I stopped my scooter in front of an old and dilapidated building. A haggered, skinny old man with drooping shoulders came towards me. "Don't go in, Sir", he whispered. "It is dangerous..."

- b) Write the story of the Hare and the Tortoise but make an exciting change in the ending of the story.
- Write a letter to the Police Commissioner, complaining about the increasing number of thefts in your area.
- You are Pushpa of Ambala .Write a letter to the XYZ bakery ordering some bakery items.

#### Learning work

Learn question answers of lesson 1 and 2(both books) thoroughly.

#### Creative work

- Prepare a beautiful chart on any topic of Grammar. Use your creativity and your own idea to present the topic on the chart. It should be creative, colourful and appealing.
- Maintain a diary and write down your activities of at least 10days (how you spend your day.....what you did....games....study).
- Collect articles, poems, Stories, advertisement, notices etc from newspaper and make your own magazine using the same. Use your creativity and make the cover for the same.

#### **Computer**

- 1) Prepare an assignment on unit -1 (introduction to IT-ITes industry)
- 2) Prepare an assignment on unit -2 (Data Entry and keyboarding skills)

#### **SCIENCE**

#### Do this work in science notebook.

#### Answer the following questions

- (I) Two liquids 'A' and 'B' are miscible with each other at room temperature. Which separation technique will you apply to separate the mixture of 'A' and 'B' if the difference in their boiling points is 27°C?
- (II) An unknown substance 'A' on thermal decomposition produces 'B' and 'C'. What is 'A'—an element, a compound or a mixture?
- (III) Sea water can be classified as homogeneous as well as heterogeneous mixture.' Comment.
- (IV) While diluting a solution of salt in water, a student by mistake added acetone (boiling point 56°C). What technique can be employed to get back the acetone? Justify your choice.
- (V) Rain water stored in a tank contains sand grains, unfiltrable clay particles, calcium carbonate, salt, pieces of paper and some air bubbles. Select from amongst these one example each of a solvent, a solute, a colloid and a suspension.
- (VI) Name the process associated with the following:
  - (a) Dry ice is kept at room temperature and at one atmospheric pressure.

(b) A potassium permanganate crystal is in a beaker and water is poured into the beaker with stirring.

(c) An acetone bottle is left open and the bottle becomes empty.

(d) Milk is churned to separate cream from it.

(e) Settling of sand when a mixture of sand and water is left undisturbed for some time.

(f) Fine beam of light entering through a small hole in a dark room, illuminates the particles in its paths.

- (VII) Non-metals are usually poor conductors of heat and electricity. They are non-lustrous, nonsonorous, non-malleable and are coloured.
  - (a) Name a lustrous non-metal.
  - (b) Name a non-metal which exists as a liquid at room temperature.
  - (c) The allotropic form of a non-metal is a good conductor of electricity. Name the allotrope.
  - (d) Name a non-metal which is known to form the largest number of compounds.
  - (e) Name a non-metal other than carbon which shows allotropy.
  - (f) Name a non-metal which is required for combustion.
- (VIII) A solution contains 30 g of glucose, 20 g of salt in 500 mL of water. Calculate the mass per cent of

(a) glucose,

(b) salt (density of water = 1 g/mL).

(IX) During an experiment the students were asked to prepare a 10% (Mass/Mass) solution of sugar in water. Ramesh dissolved 10 g of sugar in 100 g of water while Sarika prepared it by dissolving 10 g of sugar in water to make 100 g of the solution.

(a) Are the two solutions of the same concentration?

- (b) Compare the mass % of the two solutions.
- (X) Calculate the mass of water and glucose required to make 250 g of 40% solution of glucose.

# <u>हिंदीगृहकार्यः</u>

अनुच्छेद लेखन

- स्वच्छ भारत अभियान
- खेल और स्वास्थ्य
- कंप्यूटर आज की जरूरत
- सोशल मीडिया और किशोर

पत्रलेखन

- अपने क्षेत्र केविधायक को पत्र लिखकर अपने गाँव में एक बालिका विद्यालय की स्थापना के लिए अनुरोध कीजिए।
- गत कुछ दिनों में आपके क्षेत्र में अपराध बढ़ने लगे हैं जिससे आप चिंतित हैं । अपराधों की रोकथाम के लिए थाना अध्यक्ष को पत्र लिखिए ।
- छोटे भाई को कुसंगति से बचने के लिए पत्र लिखिए ।
- अपनी बहन को पत्र लिखकर योगासन करने के लिए प्रेरित कीजिए ।

विज्ञापनलेखन

- किसी ठंडे पेय पदार्थ का विज्ञापन बनाइए ।
- अपने विद्यालय का विज्ञापन बनाइए ।

संदेशलेखन

- अपने मित्र को स्वतंत्रता दिवस के अवसर पर शुभकामना संदेश लगभग 40 शब्दों में लिखिए ।
- पोलियो ड्रॉप्स के प्रति जागरूकता प्रकट करते हुए देशवासियों को लगभग 40 शब्दों में संदेश लिखिए । एक्टिविटी
  - अलंकार की परिभाषा देते हुए अनुप्रास, यमक, उपमा, रूपक अलंकार की एक्टिविटी बनाइए ।

## MATH :

- 1) Write and learn all formulas from book.
- 2) Write and learn square and square roots from 1to 30.
- 3) Write and learn cube and cube roots from 1 to 30.
- 4) Write and learn all algebric identities.(only useful for  $9^{th}$  and  $10^{th}$ )

## Activity:

- 1) Find short tricks for square, square roots, cube, and cube roots.
- 2) Solve all theorems of ch6 lines and angles and ch7 triangles.

## Project Work:

- 1) Make a formula chart.
- 2) Make a chart on great Mathematicians and their inventions.

## Assignment

- 1) Solve Example of ch 1, ch2 ,ch3, ch4, ch5 and ch6..
- 2) Solve questions on each operation on Rational Number.
- 3) Solve 5 questions of the following i) Zeros of Polynomial ii) Remainder Theorem iii) Factors theorem.
- 4) Prove all algebraic identities used ex 2.5.
- 5) Write Euclid's Defination, Axioms and Postulates.

# DAV Police Public School, Ihaijar



Class : 9th Subject : Science Worksheet

- 1. A car starts from rest and acquire a velocity of 30 km/h in 4 sec. Find its acceleration and distance travelled by it during this time interval? Assume acceleration of car is uniform.
- 2. An object travels first 20 m in 5 sec. and another 20 m in 7 seconds. What is the average speed of the object?
- 3. A train starting from a railway station and moving with uniform acceleration attains a speed of 40 km/h in 5 minutes. Find its acceleration.
- 4. A trolly, while going down an inclined plane has an acceleration of 4 m/s<sup>2</sup>. What will be its velocity 4 seconds after the start?
- 5. Calculate the acceleration and distance of the body moving with 5 m/s which comes to rest after traveling for 6 sec?
- 6. A ball is thrown vertically upwards with a velocity of 49 m/s. Calculate
  - (i) The maximum height to which it rises.
  - (ii) The total time it takes to return to the surface of the earth.
- 7. A stone is thrown vertically upward with an initial velocity of 40m/s. Taking g=10m/s2, find the maximum height reached by the stone. What is the net displacement and the total distance covered by the stone?
- 8. A ball is thrown up vertically returns to the thrower after 6s. Find
  - (a) The velocity with which it was thrown up,
  - (b) The maximum height it reaches, and
  - (c) Its position after 4s.
- 9. Study the given velocity-time graph of a car and solve the given questions.
  - (a) What type of motion is represented by OA?
  - (b) What type of motion is represented by AB?
  - (c) What type of motion is represented by BC?
  - (d) Find the acceleration of the body from O to A.
  - (e) Find out retardation of the body from B to C.
  - (f) Find out the distance travelled by the body from A to B.
- 10. On a 200 km track, a train travel first 50 km at a uniform speed of 30 km/h. How fast the train must travel the next 150 km so as to maintain the average speed of 60 km/h for the whole journey?
- 11. A student while going to school in a car computes the average speed of the car to be 10 km/h. On his return trip along the same path, the average speed is 20 km/h. What is the average speed of the car in the entire journey?
- 12. Study the velocity-time graph and calculate
  - A. The acceleration, average velocity and displacement from A to B.
  - B. The acceleration, average velocity and displacement from B to C.
  - C. The distance covered in the region ABE.
  - D. The average velocity from C to D.
- 13. A particle is moving in a circular path of radius r. What would be the distance and displacement after half a circle?
- 14. What is the ratio of distance to the magnitude of displacement when the body is moving in one direction?
- 15. A cyclist goes around a circular track once every 2 minutes. If the radius of circular track is 105 m. Calculate his speed.
- 16. A stone is thrown vertically upward from the ground with a velocity of 10m/s. What will be the height attained by the stone and how much time will it take to reach the ground again?
- 17. The brakes are applied to a car produce an acceleration of 4 m/s<sup>2</sup> in the opposite direction of motion. If the car takes 4 seconds to stop after the application of brakes, calculate the distance it travels during this time.
- 18. If average walking speed of a girl from her home to school is 2 km/h and it takes her 20 minutes to reach there, calculate the distance between her to school.



(m/s) 50

velocity 30

40

20

O

10 20 30 40 50

time (s)

#### Class 9 SST Holiday homework

1. Complete the maps on following topics-

PHYSICAL MAP 1

(a) Tropic of Cancer (Also locate the states on tropic of cancer) (b) Standard Meridian (c) Latitudinal extent and Longitudinal extent

- (d) Southernmost point of India
- (e) Northernmost point of India
- (f) Easternmost point
- (g) Westernmost point
- (ii) PHYSICAL MAP 2
- (a) Neighbouring Countries (b) Islands
- (iii) POLITICAL MAP 3
- (a) States with capitals (b) Union Territories
- (iv) POLITICAL MAP 4
- (a) States sharing international boundaries

2 Make a project on physical features of India.

3. Prepare picture book on different types of natural vegetation found in India, detailing its features, types of trees found, wild life and regions. (use only one or two photos for one type forests.

4. Make a report on the negative effect of industrialization and urbanisatation on river Ganga (500 words)

5. Share ways to keep yourself healthy and hygienic with at least 10 people.

OR

Write any 5 ways to reduce the wastage of resources .You can also draw or paste pictures on an A4 size sheet.

6. Prepare a video acting as a freedom fighter speaking his/her popular slogan.

7. Find out how pollution depleting our national monuments.List some ways to protect Our national monuments on an A4 size sheet .Also paste the picture to show the damage caused on monuments by humans.

8. Answer the following questions-

1Write down the size of top 10 largest countries of the world ?

2 Explain the formation of Northern plain of India.

3 How Himalayas are formed?

4 How rivers get polluted? State some points to save rivers

5 Explain the mechanism of monsoon in India ?

6 What is ITCZ ? How its affect Indian monsoon

7 What are the different types of forest found in India ? Explain each with examples.

8 How can you say population is an assert and a burden ?

9 Explain the different Physical features of India ?

10 Differentiate between Himalayan and Peninsular rivers.

11 What is National Park? How they are useful in saving wildlife and natural vegetation .