

SUMMER VACATION HOME WORK

Morning star school

CLASS-Xth

Summer Vacations Are Here!!

Dear children.

We are sure that all of you will enjoy your holidays. You must have started making plans to visit your grandparents, relatives and friends, watching television during the day, taking a dip in the swimming pool and joining some activity classes. We wish that you enjoy every minute of this long break with your family and friends. It will be great if you are able to find time to visit museum and monuments. Learn new things, explore new areas near your house, play indoor and outdoor games, read many story books, help your parents and grandparents, go for morning walk and play in the park in the evening during your long summer break. We are giving you a variety of fun-filled activities and worksheets which you can do during this time. Do them neatly and submit the worksheets to your teachers after the vacation. Wish you all have very enjoyable and fun-packed summer break.

Enjoy!!!

Subject -English

-Prepare a scrapbook sticking at least 20 newspaper articles/news from any English newspaper.

-Word Tree

In the same scrapbook prepare a 'Word Tree' using any 10 five letter words. Draw parts of a tree and write the words there.

In a thin register define in detail with 2 examples each the following literary devices:

Simile

Metaphor

Personification

Hyperbole

Irony

Synecdoche

Paradox

Onomatopoeia

Oxymoron

- In the same register read the question and draw a poster:

Lencho suffered first due to drought and then by floods . Our country is also facing such situations in recent years . There is flood and there is drought. There is a need to save water through water harvesting. Design a poster for your area on how to save water during summer and when it is available in

excess.

- Model Reading

Read atleast 4 pages daily of your text books .This will help you in improving your spoken as well as written English. You can even read any one of the following novels :

Gulliver's Travel

The Diary of Anne Frank

The Magical Universe

You Are Born to Blossom

You can also read film review of the following movies:

School of Rock

Saving Private Ryan

The Man Who Knew Infinity

Karate ki

Subject -Hindi

प्रश्न-१- परियोजना कार्य

- 1- कबीरदास जी का जीवन परिचय देते हुए उनकी रचनाओं का सचित्र वर्णन कीजिए।
- 2- छायावाद की स्तंभ महादेवी वर्मा का परिचय देते हुए उनकी कविताओं का सचित्र वर्णन कीजिए।
- 3-हरिवंश राय बच्चन का जीवन परिचय देते हुए उनकी मुख्य- मुख्य कविताओं का सचित्र वर्णन कीजिए।
- 4-रस क्या है उनके प्रकारों का सचित्र वर्णन कीजिए।

प्रश्न 2-लघु कथा लिखिए--

- 1- परोपकार
- 2- सच्ची मित्रता
- 3- हार जीत

नोट- 1-परियोजना कार्य में से किसी एक विषय पर कार्य करना है।

2-लघु कथा तीनों ही करना है।-

Subject:-Mathematics

HOLIDAY HOMEWORK/ASSIGNMENT-2021-22
CLASS-8
MATHEMATICS

Date _____
Page _____

* CHAPTER-2 (POLYNOMIALS)

Q.1 Find a quadratic polynomial each with the given numbers as sum and product of its zeroes respectively
 (i) $\frac{1}{4}, -1$ (ii) $0, \sqrt{5}$ (iii) $\sqrt{2}, \frac{1}{3}$ (iv) $\frac{1}{4}, -\frac{1}{4}$

Q.2 Find the zeroes of the following quadratic polynomials and verify the relationship b/w the zeroes and the coefficients.
 (i) $x^2 - 2x - 8$ (ii) $3u^2 + 6u$ (iii) $p^2 - 3$

Q.3 If α, β are zeroes of quadratic polynomial $2x^2 + 5x + k$, find the value of k such that $(\alpha + \beta)^2 - \alpha\beta = 24$

Q.4 If one zero of the quadratic polynomial $2x^2 - 3x + p$ is 3, find the other zero also find the value of p

Q.5 If α and β are zeroes of the quadratic polynomial $4x^2 + 4x + 1$, then form a quadratic polynomial whose zeroes are 2α and 2β

Q.6 Verify, whether 2, 3 and $\frac{1}{2}$ are the zeroes of the polynomial $p(x) = 2x^3 - 11x^2 + 17x - 6$

Q.7 Obtain all other zeroes of $3x^4 + 6x^3 - 2x^2 - 10x - 5$ if two of its zeroes are $\sqrt{5/3}$ and $-\sqrt{5/3}$

Q.8 If the polynomial $6x^4 + 8x^3 + 17x^2 + 21x + 7$ is divided by another polynomial $3x^2 + 4x + 1$, the remainder comes out to be $(a + b)$, find a and b .

A

Page _____

PAIR OF
CHAPTER - 3 (LINEAR EQUATIONS IN TWO VARIABLES)

Q.9 Solve the following pair of linear equations by elimination method / cross multiplication method / substitution method

(i) $2x - 3y = 10$ (ii) $x - 3y - 7 = 0$ (iii) $3x - 5y = 20$
 $4x - 6y = 20$ $3x - 3y - 15 = 0$ $6x - 10y = 40$

Q.10 Find the value of k so that the following system of equations has no solutions.
 $3x - y - 5 = 0$, $6x - 2y + k = 0$

Q.11 For what value of k will the equations $x + 2y + 7 = 0$, $2x + ky + 14 = 0$ represent coincident lines?

Q.12 Solve the following system of equations by cross-multiplication method

(i) $\frac{x}{a} + \frac{y}{b} = a + b$; $\frac{x}{a^2} + \frac{y}{b^2} = 2$
 (ii) $\frac{b}{a}x + \frac{a}{b}y = a^2 + b^2$; $x + y = 2ab$

ACTIVITY WORK (Practise)

Activity-1 . To find two real zeros of a quadratic polynomial graphically:
 * To verify graphically that $x = 1$ and $x = 3$ are the two real zeros of the quadratic polynomial $x^2 - 4x + 3$

Activity-2: To verify graphically that the pair of linear equations $x + 2y + 4 = 0$, $x + 2y - 3 = 0$ in which $\frac{a_1}{a_2} = \frac{b_1}{b_2} \neq \frac{c_1}{c_2}$ gives a pair of parallel straight lines.

Subject -Social science

HISTORY

Chapter -2 Map work

CIVICS

WORKSHEET

GEOGRAPHY

WORKSHEET

ECONOMICS

WORKSHEET

NOTE÷you have to solve the worksheet in your notebooks

Subject-Science

BIOLOGY

Q. 1 How do we detect that we are touching a hot object? All information from our environment is detected by the specialised tips of some nerve cells. These receptors are usually located in our sense organs, such as the inner ear, the nose, the tongue, and so on. So gustatory receptors will detect taste while olfactory receptors will detect smell. This information, acquired at the end of the dendritic tip of a nerve cell, sets off a chemical reaction that creates an electrical impulse. This impulse travels from the dendrite to the cell body, and then along the axon to its end. At the end of the axon, the electrical impulse sets off the release of some chemicals. These chemicals cross the gap, or synapse, and start a similar electrical impulse in a dendrite of the next neuron. This is a general scheme of how nervous impulses travel in the body.

On the basis of above paragraph give answer of following questions

What happens at the synapse between two neurons?

How do we detect the smell of an agarbatti (incense stick)?

Q. 2 Assertion – In multicellular organisms respiratory pigments take up oxygen from the air in the lungs and carry it to tissues

Reason When the body size of animals is large, the diffusion pressure alone cannot take care of oxygen delivery to all parts of the body.

Assertion and reason both are true

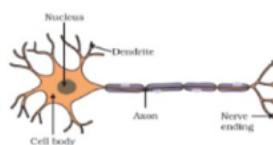
Assertion is true but reason is false

Assertion is not true but reason is true

Assertion and reason both are false

Q. 3 Look at the following figure and identify the parts of a neuron

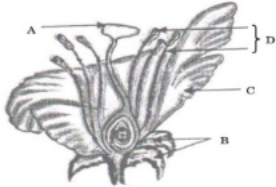
Where information is acquired



Through which information travels as an electrical impulse
Where this impulse must be converted into a transmission

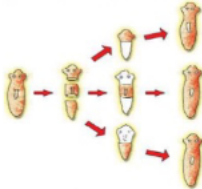
Q. 3

(a) In the given diagram, name the parts where (i) pollen grains are produced, and (ii) pollen grains are transferred.



(b) What happens to ovule and ovary after fertilisation ?

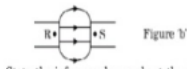
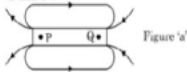
(a) Name the process shown below and define it :



(b) Name the types of cells present in the organisms which exhibit this process.

Q. 5

(a) Name the poles P, Q, R and S of the magnets in the following figures 'a' and 'b' :



(b) State the inference drawn about the direction of the magnetic field lines on the basis of these diagrams.

Q. 6 Choose the correct answer

i. Which of the following are energy foods?

(a) Carbohydrates and fats

(b) Proteins and mineral salts

(c) Vitamins and minerals

(d) Water and roughage

ii. In which mode of nutrition an organism derives its food from the body of another living organism without killing it?

(a) Saprotrophic nutrition

(b) Parasitic nutrition

(c) Holozoic nutrition

(d) Autotrophic nutrition

iii. The mode of nutrition found in fungi is:

(a) Parasitic nutrition

(b) Holozoic nutrition

(c) Autotrophic nutrition

(d) Saprotrophic nutrition

iv. Roots of the plants absorb water from the soil through the process of:

(a) diffusion

(b) transpiration

(c) osmosis

(d) None of these

v. In amoeba, food is digested in the:

(a) food vacuole

(b) mitochondria

(c) pseudopodia

(d) chloroplast

vi. The brain is responsible for

- (a) thinking.
- (b) regulating the heart beat.
- (c) balancing the body.
- (d) all of the above

vii. Which of the following is a plant hormone?

- (a) Insulin
- (b) Thyroxin
- (c) Estrogen
- (d) Cytokinin.

viii. The gap between two neurons is called a

- (a) dendrite.
- (b) synapse.
- (c) axon.
- (d) impulse.

Q. 7 What are the differences between aerobic and anaerobic respiration? Name some organisms that use the anaerobic mode of respiration.

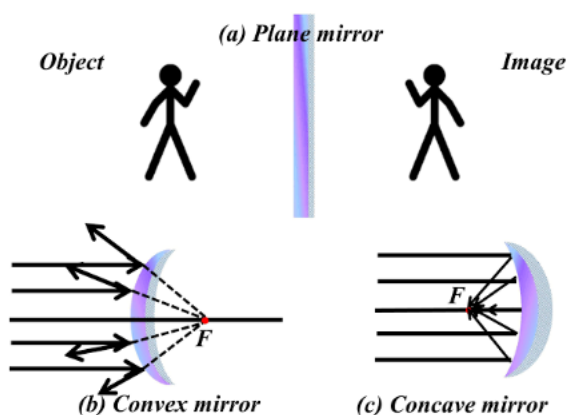
Q. 8 Describe double circulation of blood in human beings. Why is it necessary?

PHYSICS

1. Read the following paragraph and write answers of the questions from (i) to (v)

The spherical mirror forms different types of images when the object is placed at different locations. When the image is formed on screen, the image is real and when the image does not form on screen, the image is virtual. When the two reflected rays meet actually, the image is real and when they appear to meet, the image is virtual.

A concave mirror always forms a real and inverted image



for different positions of the object. But if the object is placed between the focus and pole, the image formed is virtual and erect.

A convex mirror always forms a virtual, erect and diminished image. A concave mirror is used as doctor's head mirror to focus light on body parts like eyes, ears, nose etc., to be examined because it can form erect and magnified image of the object. The convex mirror is used as a rear view mirrors in automobiles because it can form an small and erect image of an object.

(i) When an object is placed at the centre of curvature of a concave mirror,

the image formed is

- (a) larger than the object
- (b) smaller than the object
- (c) same size as that of the object
- (d) highly enlarged.

(ii) No matter how far you stand from a mirror, your image appears erect. The mirror is likely to be

- (a) plane (b) concave (c) convex (d) either plane or convex.

(iii) A child is standing in front of a magic mirror. She finds the image of her head bigger, the middle portion of her body of the same size and that of the legs smaller. The following is the order of combinations for the magic mirror from the top.

- (a) Plane, convex and concave
- (b) Convex, concave and plane
- (c) Concave, plane and convex
- (d) Convex, plane and concave

(iv) To get an image larger than the object, one can use

- (a) convex mirror but not a concave mirror
- (b) a concave mirror but not a convex mirror
- (c) either a convex mirror or a concave mirror
- (d) a plane mirror.

(v) A convex mirror has wider field of view because

(a) the image formed is much smaller than the object and large number of images can be seen.

(b) the image formed is much closer to the mirror

(c) both (a) and (b)

(d) none of these.

Select and write one most appropriate option out of the four options given for each of the questions

2. The bouncing back of the ray in the same medium is called as

(a) Refraction (b) Reflection (c) Dispersion (d) Diffraction

3. The angle of incidence is equal to the

(a) Angle of glancing (b) Angle of deviation

(c) Angle of reflection (d) Angle refraction

4. The image formed by the plane mirror is always

(a) Virtual, erect and diminished

(b) Virtual, erect and magnified

(c) Virtual, erect and of the same size

(d) Real, erect and of the same size

5. For spherical mirrors the relationship between radius of curvature R and focal length is

(a) $R=f/2$ (b) $F= R/2$ (c) $F= 2R$ (d) All of these.

(v) Concave mirror is also called as

(a) Converging mirror (b) Diverging mirror (c) Both a and b

(d) None

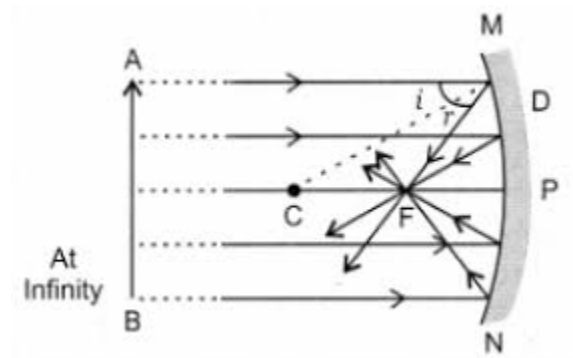
6. Convex mirror is also called as

(a) Converging mirror (b) Diverging mirror

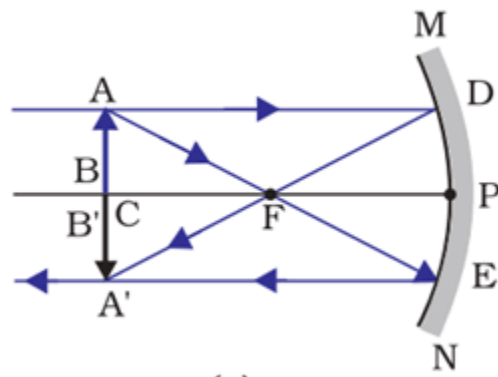
(c) Both a and b (d) None

7. Explain the ray diagram with the following

(i) Nature of image (ii) Size of image

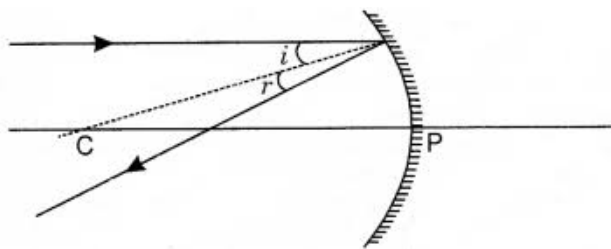


(a)



(b)

8. Write atleast four point about the ray diagram which is given below.



Directions: In each of the following questions, a statement of Assertion is given and a corresponding statement of Reason is given just below it. Of the statements, given below, mark the correct answer as:

- (a) Both A and R are true and R is the correct explanation of A.
- (b) Both A and R are true but R is not the correct explanation of A.
- (c) A is true but R is false.
- (d) A is false but R is true.

9. **Assertion (A)** : A ray passing through the centre of curvature of a concave mirror after reflection, is reflected back along the same path.

Reason (R) : The incident rays fall on the mirror along the normal to the reflecting surface.

10. **Assertion(A)**: The mirrors used in search lights are concave spherical.

Reason (R) : In concave spherical mirror the image formed is always virtual.

11. **Assertion(A)** : For observing traffic at back, the driver mirror is convex mirror.

Reason (R) : A convex mirror has much larger field of view than a plane mirror.

12. **Assertion(A)** : The height of an object is always considered positive.

Reason (R) : An object is always placed above the principal axis in this upward direction

13. **Assertion(A)**: Virtual images are always erect.

Reason (R) : Virtual images are formed by diverging lenses only.

14.**Assertion(A)** : The centre of curvature is not a part of the mirror. It lies outside its reflecting surface.

Reason (R) : The reflecting surface of a spherical mirror forms a part of a sphere. This sphere has a centre.

15.**Assertion(A)** : Mirror formula can be applied to a plane mirror.

Reason (R) : A plane mirror is a spherical mirror of infinite focal length.

Subject-Chemistry

1. NCERT exercise chapter 1 [Chemical reaction and equations].
2. Working model project based on art integrated project.

Subject -Computer

- A.** Write notes with diagram on following topic:- (ASSIGNMENT FILE) (minimum 2 Pages required for each topic)
1. Emerging technology
 2. Programming with Python
 3. Importance of Computer in space research
- B.** Write about Alan Turning, Father of Computer Science And Artificial Intellegence. (ASSIGNMENT FILE)
- C.** Write 10 HTML program with their output (ASSIGNMENT FILE)

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