

الاجابات نهاية الصفحة

Choose the correct answer :

1. Amoeba reproduce by.....
 - a. binary fission.
 - b. gametes.
 - c. regeneration.
 - d. budding.
2. Scientists believe that the matter of the universe was a... ball of high pressure and high temperature.
 - a. liquid
 - b. solid
 - c. gaseous
 - d. no correct answer
3. When an object is placed between the focus of a convex lens and its center of curvature the formed image will be.....
 - a. real, inverted and diminished.
 - b. real, inverted and magnified.
 - c. virtual, erect and magnified.
 - d. virtual, erect and diminished.

B Mention the name of the scientist who:

1. Put the nebular assumption theory about the evolution of the solar system.
2. Discovered a way to use Nano-molecules of gold to detect the cancer.
3. Used the way of concentrating the Sun rays to destroyed the Roman fleet in 212 B.C.

C In a race, a runner moves at a regular speed of 10m/sec. from the start of the race to the fifth second and there was a car that moves beside him, the speed of the car increases from zero to 25 m/sec. in 5 seconds also.

(a) Draw a graph (speed - time) and record on it.

- (1) the movement of the runner.
- (2) the movement of the car.

(b) Use the previous graph to calculate:

- (1) the distance covered by the runner.
- (2) the time in which the speed of the runner is equal to the s

Question 2

A Write the scientific term of the following:

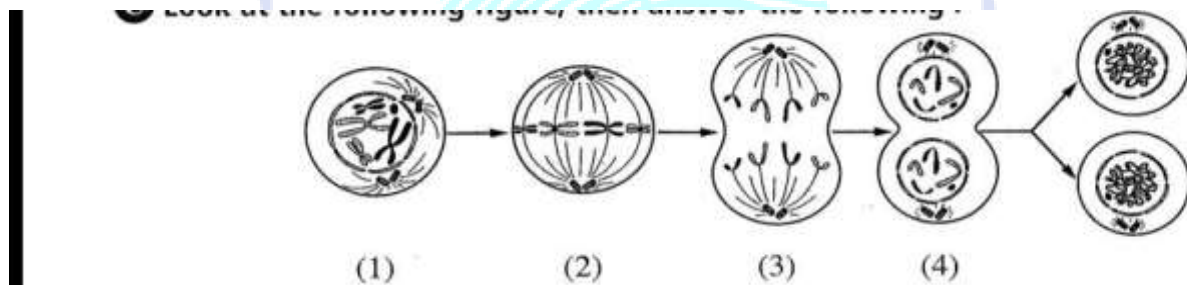
1. Fibers extend between the two poles of the cell in prophase.
2. The change in the position of a body by the time related to the position of another body.
3. The image that cannot be received on the screen.

4. A theory assumed that the solar system was originally a big star which is the Sun.

B Mention the importance for the following:

1. A convex mirror is put at the left side of the driver of the car.
2. The direction of the wind affects the velocity of aircraft (plans).

C Look at the following figure, then answer the following:



1. What is the kind of cell division in this figure?
2. What is the name of phases number (2) and (3).
3. What will disappear in phase number (1).

Question 3

A Give reasons for :

1. In short-sightedness, the retina is far from the eye lens.
2. The importance of interphase in the cellular division.
3. The object which moves at regular speed, its acceleration equals zero.
4. The constancy of the planets in their orbits around the Sun.

B What happens when ... ?

1. If the liver gets injured or a part of it is cut.
2. A light ray passes through the optical center of the lens.

C Two trains move parallel to each other but in opposite direction the speed of the first train 65 km/h. and the speed of the second train is 85 km./h. Calculate the speed of the first train that observed by passengers in the second train.

Question 4

A Correct the underlined words:

1. The force is the length of the shortest straight line between two position.
2. It is a cell produced due to fertilization called tetrad.
3. The lion is considered one of the fastest wild animals.
4. The chromosome chemically consists of nuclear acid called DNA and starch.

B What is meant by ... ?

1. Crossing over phenomenon.
2. Vector physical quantities.

C Show by drawing the pass and the directions of rays to an object in front of a concave mirror at a distance greater than double focal length, knowing that its focal length is 0.025 m with determine the properties of the formed image.

Answers

Choose the correct answer :

1. Amoeba reproduce by.....

- a. **binary fission.**
- b. gametes.
- c. regeneration.
- d. budding.

2. Scientists believe that the matter of the universe was a... ball of high pressure and high temperature.

- a. liquid
- b. solid
- c. **gaseous**
- d. no correct answer

3. When an object is placed between the focus of a convex lens and its center of curvature the formed image will be.....

- a. real, inverted and diminished.
- b. **real, inverted and magnified.**
- c. virtual, erect and magnified.
- d. virtual, erect and diminished.

B Mention the name of the scientist who:

1. Put the nebular assumption theory about the evolution of the solar system. **Laplace**

2. Discovered a way to use Nano-molecules of gold to detect the cancer. **Mustafa Elsaid.**

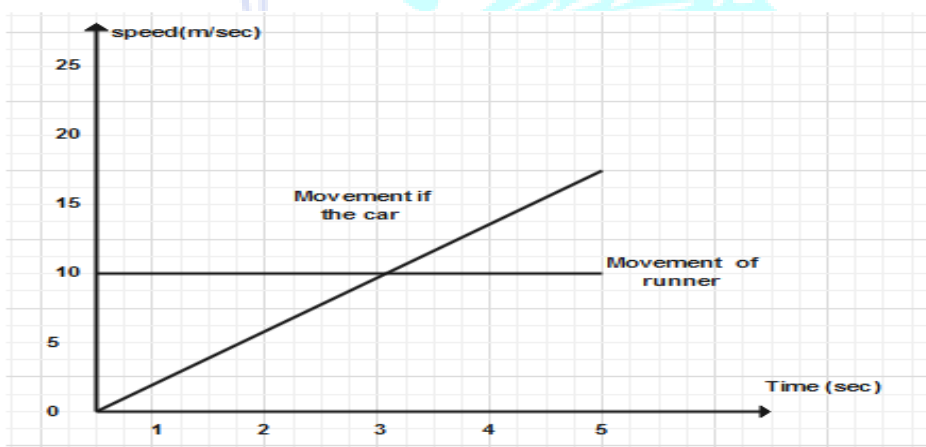
3. Used the way of concentrating the Sun rays to destroyed the Roman fleet in 212

Archimedes

B.C.

C In a race, a runner moves at a regular speed of 10m/sec. from the start of the race to the fifth second and there was a car that moves beside him, the speed of the car increases from zero to 25 m/sec. in 5 seconds also.

(a) Draw a graph (speed - time) and record on it.



(1) the movement of the runner.

(2) the movement of the car.

(b) Use the previous graph to calculate:

(1) the distance covered by the runner. $d = v \times t = 10 \times 5 = 50 \text{ m}$

Question 2

A Write the scientific term of the following:

1- 1 Fibers extend between the two poles of the cell in prophase. **spindle fibers**

2. The change in the position of a body by the time related to the position of another body. **Motion**

3. The image that cannot be received on the screen. **virtual image**

1. A theory assumed that the solar system was originally a big star which is the Sun.

Crossing star theory.

B Mention the importance for the following:

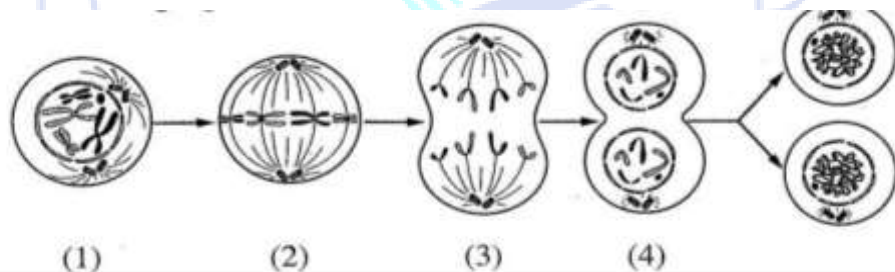
1. A convex mirror is put at the left side of the driver of the car.

It forms an erred and diminished images For the road behind the driver of the car.

2. The direction of the wind affects the velocity of aircraft (plans).

To calculate the fuel consumption of the Arp and also the time taken

C Look at the following figure, then answer the following:



1. What is the kind of cell division in this figure? **Mitotic division.**

2. What is the name of phases number (2) and (3). **Metaphase Anaphase.**

3. What will disappear in phase number (1). **Nucleus and nuclear membrane**

Question 3

A Give reasons for :

In short-sightedness, the retina is far from the eye lens.

Due to the increase in the eye ball diameter

1. The importance of interphase in the cellular division.

To prepare the cell for division by:

- occurrence of some biological processes
- duplication the amount of genetic material

2. The object which moves at regular speed, its acceleration equals zero.

Because that its $\Delta v = \text{zero}$

4. The constancy of the planets in their orbits around the Sun.

Due to the attraction force

B What happens when ... ?

1. If the liver gets injured or a part of it is cut. **The cells of the remaining part undergo mitotic division to compensate the missing part**

2. A light ray passes through the optical center of the lens.

It passes without refraction

C Two trains move parallel to each other but in opposite direction the speed of the first train 65 km/h. and the speed of the second train is 85 km./h. Calculate the speed of the first train that observed by passengers in the second train.

Relative speed = $65 + 85 = 150 \text{ km/h}$

Question 4

A Correct the underlined words:

1. **Amount** of displacement is the length of the shortest straight line between two position.
2. It is a cell produced due to fertilization called **Zygote**.
3. **cheetah** is considered one of the fastest wild animals.
4. The chromosome chemically consists of nuclear acid called DNA and **protein**.

B What is meant by ... ?

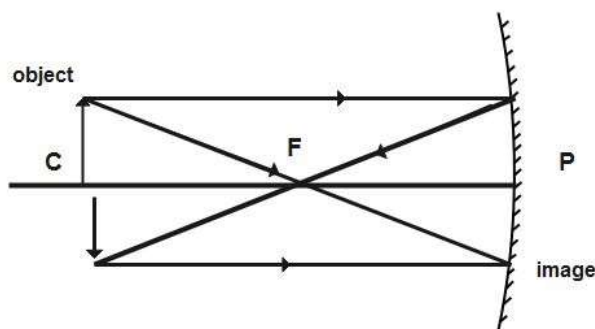
1. Crossing over phenomenon.

It is **a Phenomenon occurs at the end of pro phase 1, through which an exchange between the 2 inner chromatid of tetrad occurs Leading to a genetic variation in the offspring**

2. Vector physical quantities.

It is the quantities which require to identify it, knowing its magnitude as well as its direction

C Show by drawing the pass and the directions of rays to an object in front of a concave mirror at a distance greater than double focal length, knowing that its focal length is 0.025 m with determine the properties of the formed image.



The prop's of the image: real, inverted and diminished.