

(Tue) 5/5/20, CI-X, EVS

Ch-5, Topic (Food Aid)

Home Assignment...

- 1) What is food aid?
- 2) Why is food aid important?
- 3) How does food aid work?
- 4) What is food aid PDF?
- 5) How many people worldwide receive in kind food assistance?

CLASS – X

HOME ASSIGNMENT

Subject- SUPW

Date – 04.05.2020

HANDKERCHIEF PAINTING

Today I will discuss about the materials that will be used in a handkerchief painting and I think will be very much helpful in doing your project.

List of some materials are written below:-

1. White Cotton Cloth
2. Color
3. Pencil
4. Eraser
5. Frame
6. Brush
7. Rough Cloth for brush
8. Pallet

These are the basic simple materials that will be used in doing your project and I hope you all will do the project in a neat and clean way.

Mathematics-Probability

Class-X

Assignment:- Date:-05.05.20

Q1.

A bag contains 3 red balls and 5 black balls. A ball is drawn at random from in bag. What is the probability that the ball drawn is .

(i) red ?

(ii) not red ?

Solution:

Number of red balls = 3

Number of black balls = 5

Total balls = 3 + 5 = 8

Let P (E) be the probability of red balls,

then P (\bar{E}) will be the probability of not red balls.

$$P (E) + P (\bar{E}) = 1$$

$$(i) \text{ But } P(E) = \frac{\text{Number of favourable outcome}}{\text{Number of possible outcome}}$$

$$= \frac{3}{8}$$

$$(ii) P (\bar{E}) = 1 - P(E)$$

$$= 1 - \frac{3}{8}$$

$$= \frac{8-3}{8}$$

$$= \frac{5}{8}$$

Q2.

There are 40 students in Class X of a school of which 25 are girls and the others are boys. The class teacher has to select one student as a class representative. She writes the name of each student on a separate card, the cards being identical. Then she puts cards in a bag and stirs them thoroughly. She then draws one card from the bag. What is the probability that the name written on the card is the name of

(i) a girl ?

(ii) a boy ?

Solution:

Number of total students = 40

Number of girls = 25

Number of boys = 40 - 25 = 15

(i) Probability of a girl

$$P(E) = \frac{\text{Number of favourable outcome}}{\text{Number of possible outcome}}$$

$$= \frac{25}{40}$$

$$= \frac{5}{8}$$

(ii) Probability of a boy

$$P(E) = \frac{\text{Number of favourable outcome}}{\text{Number of possible outcome}}$$

$$= \frac{15}{40}$$

$$= \frac{3}{8}$$

Q3.

A letter of English alphabet is chosen at random. Determine the probability that the letter is a consonant.

Solution:

No. of English alphabet = 26

No. of vowel = 5

No. of constant = 26 - 5 = 21

$$P(E) = \frac{\text{Number of favourable outcome}}{\text{Number of possible outcome}}$$

$$= \frac{21}{26}$$

Q4.

A carton consists of 100 shirts of which 88 are good, 8 have minor defects and 4 have major defects. Peter, a trader, will only accept the shirts which are good, but Salim, another trader, will only reject the shirts which have major defects. One shirt is drawn at random from the carton. What is the probability that

(i) It is acceptable to Peter ?

(ii) It is acceptable to Salim ?

Solution:

In a carton, there are 100 shirts.

Number of shirts which are good = 88

Number of shirts which have minor defect = 8

Number of shirts which have major defect = 4

Total number of shirts = 88 + 8 + 4 = 100

Peter accepts only good shirts i.e. 88

Salim rejects only shirts which have major defect i.e. 4

(i) Probability of good shirts which are acceptable to Peter

$$\begin{aligned} P(E) &= \frac{\text{Number of favourable outcome}}{\text{Number of possible outcome}} \\ &= \frac{88}{100} \\ &= \frac{22}{25} \end{aligned}$$

(ii) Probability of shirts acceptable to Salim

$$\begin{aligned} P(E) &= \frac{\text{Number of favourable outcome}}{\text{Number of possible outcome}} \\ &= \frac{88+8}{100} \\ &= \frac{96}{100} \\ &= \frac{24}{25} \end{aligned}$$

Home Work-

- 1 Find the probability that the month of February may have 5 Wednesdays in
 - (i) a leap year
 - (ii) a non-leap year.
- 2 Sixteen cards are labelled as $a, b, c, \dots, m, n, o, p$. They are put in a box and shuffled. A boy is asked to draw a card from the box. What is the probability that the card drawn is:
 - (i) a vowel
 - (ii) a consonant
 - (iii) none of the letters of the word *median*.
- 3 An integer is chosen between 0 and 100. What is the probability that it is
 - (i) divisible by 7?
 - (ii) not divisible by 7?
- 4 Cards marked with numbers 1, 2, 3, 4, ..., 20 are well-shuffled and a card is drawn at random. What is the probability that the number on the card is
 - (i) a prime number
 - (ii) divisible by 3
 - (iii) a perfect square?
- 5 A box contains 25 cards, numbered from 1 to 25. A card is drawn from the box at random. Find the probability that the number on the card is :
 - (i) even
 - (ii) prime
 - (iii) multiple of 6.

Class X

05.05.2020

History

The Union Parliament

POWERS AND FUNCTIONS OF THE UNION PARLIAMENT

Legislative Powers –

1. The Parliament has exclusive powers to make laws with respect to matters mentioned in the Union List. The Parliament and the State Legislature both have the right to make laws on subjects mentioned in the Concurrent List. In case of conflict between a Central and State law, the law made by Parliament shall prevail.
2. Residuary Powers – It means that it can make laws with respect to all those matters which are not mentioned in any of the three lists- the Union List, State List and the Concurrent List.
3. Ordinance – The President may promulgate an Ordinance at a time when the Parliament is not in session. All Ordinances must be laid before both the Houses for their approval.

Control over National Finance –

1. A Money Bill can only be introduced in the Lok Sabha. It is then transmitted to the Rajya Sabha for its recommendations. The Rajya Sabha must return the Bill to the Lok Sabha within a period of 14 days with its recommendations. The Lok Sabha is free to accept or reject the recommendations made by Rajya Sabha in money matters.
2. Budget – The Parliament passes the Union Budget which contains the estimates of receipts and expenditure of the Government of India in respect of a financial year.

Control over the Executive or Administrative Affairs –

1. **The Question Hour (Interpellation)** : An starting hour a day in the daily routine of the Parliament, when in session is reserved for asking questions from the Government. The members can ask any

questions relating to the administration and policies and the Ministers are obliged to answer them.

2. **Adjournment Motion** : An Adjournment Motion pinpoints the failure of the government in the performance of its duties. It is moved only in the Lok Sabha.
3. **Censure Motion and the No Confidence Motion** – A Censure motion is moved by the MPs for criticising or condemning the government or any particular minister for its certain policies or decisions or actions. It is a means for expressing a disapproval of any failure or inaction of the government or a minister.

No Confidence Motion against the government can be moved by the members in Opposition. A No Confidence Motion gets admitted for discussion only when at least 50 Lok Sabha members support it. No Confidence Motion is an important means of Parliamentary control over the Prime Minister and his Council of Ministers. However, it can be moved only in the Lok Sabha.

4. **Monetary Controls**: A cut motion may be moved during the budget session. It is ensured that the money is spent in accordance with the decision of the Parliament. It studies the reports of the Comptroller and Auditor General of India (CAG).

Electoral Functions –

- I) Elected members of both Houses of Parliament and members of Legislative Assemblies elect the President of India.
- II) The Vice president is elected by members of both Houses of Parliament
- III) THE SPEAKER is elected by the Lok Sabha from among its members by a simple majority of members present and voting.

Judicial Powers –

- I) The President can be removed from his office by Impeachment. A resolution accusing the President may be initiated in either House of Parliament.
- II) A judge of the Supreme Court or of the High Court cannot be removed by the President, except on a joint address by both Houses.
- III) The Parliament may punish a person for obstructing the work of Parliament or showing disrespect for the House.

Home Work

- 1. Discuss the Legislative Powers of the Union Parliament.**
- 2. Define Adjournment Motion.**
- 3. Discuss the Judicial Powers of the Union Parliament.**
- 4. Which Bill only introduced in Lok Sabha?**
- 5. What is Budget?**
- 6. Define Interpellation.**
- 7. What is Residuary Powers?**

DREAMLAND SCHOOL
BIOLOGY - CLASS 10 (2020 – 2021)
ASSIGNMENT

DATE - 05/05/2020

CHAPTER – CELL CYCLE. CELL DIVISION & STRUCTURE OF CHROMOSOME

DETAILED EXPLANATION

→ Cell division is required for the following reasons –

- **For growth** – every organism, be it plant or animal, begins life as a single cell. This cell repeatedly divides to form a cluster of cells which start shaping for different functions to form tissues & organs. Thus cell division, is required for growth.
- **For replacement** – body cells are destroyed every minute by wear & tear. These cells are replaced by new cells formed through a division of their parent cells in the bone marrow.
- **For repair** – apart from normal wear & tear, tissues may be damaged by accidental injuries. Repair of such injuries occurs through cells which divide.
- **For reproduction** – reproduction is also the activity of dividing cells. In humans for example special cells in the reproductive organs undergo a special kind of cell division (meiosis) to produce sperms & eggs. These sperms & eggs unite to form zygote which develops into new individual.

→ Cell division is of two types –

1. **Mitosis** – cell division leading to growth & development
2. **Meiosis** – cell division leading to production of gametes.

MITOSIS

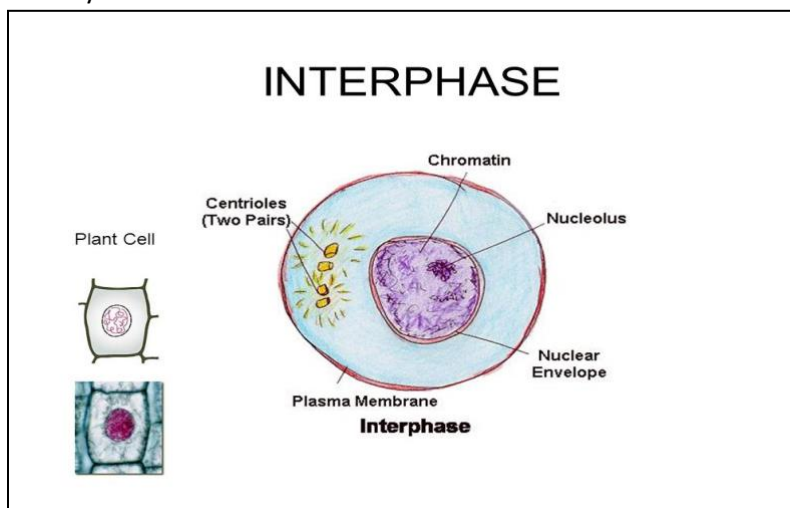
→ Mitosis is the cell division in which one parent cell divides into **two** identical daughter cells.

→ Mitosis occurs in the somatic cells (body cells).

→ Mitosis occurs in 4 main phase –

- ✓ Prophase
- ✓ Metaphase
- ✓ Anaphase
- ✓ Telophase

→ Before the stages of mitosis starts there is a phase called **Interphase** where there is no visible changes in chromosome but active synthesis of DNA occurs.

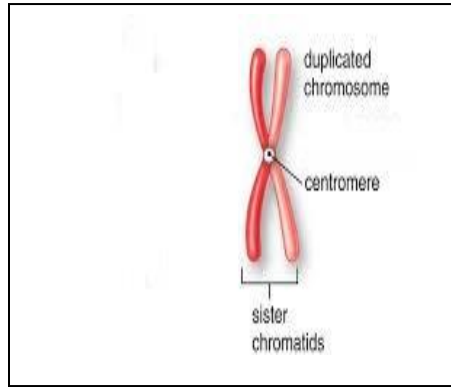


PROPHASE

Prophase A (early prophase)

- ❖ Centrioles start moving towards two poles. Centrioles are surrounded by aster rays.
- ❖ Chromosomes become distinct, short & thick. They duplicate to form two chromatids.
- ❖ Sister chromatids remain attached to each other at a small region called centromere.

Structure of chromosome →

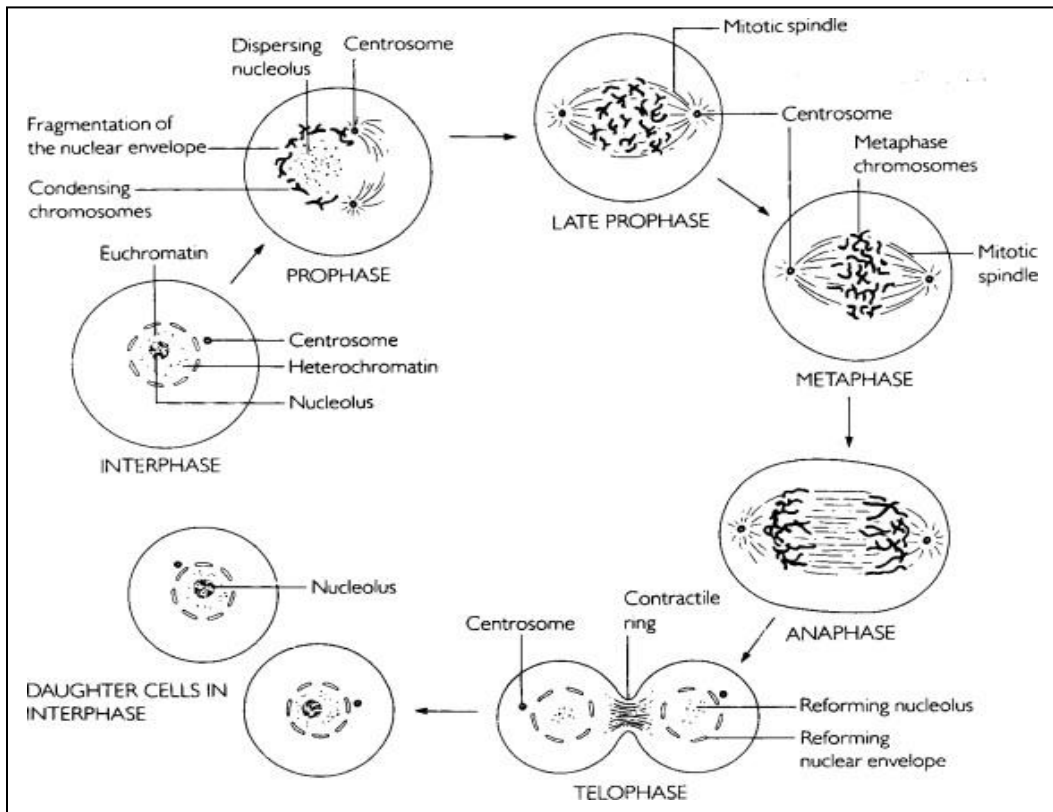


Prophase B (late prophase)

- ❖ Centrioles reach the two poles.
- ❖ Spindle fibers appear between the daughter centrioles.
- ❖ Nuclear membrane & nucleolus disappear.
- ❖ The chromosomes start moving towards the 'equator' of the cell.

METAPHASE

- ❖ Each chromosome gets attached to spindle by its centromere.
- ❖ Chromosomes lined up in one plane at equator.

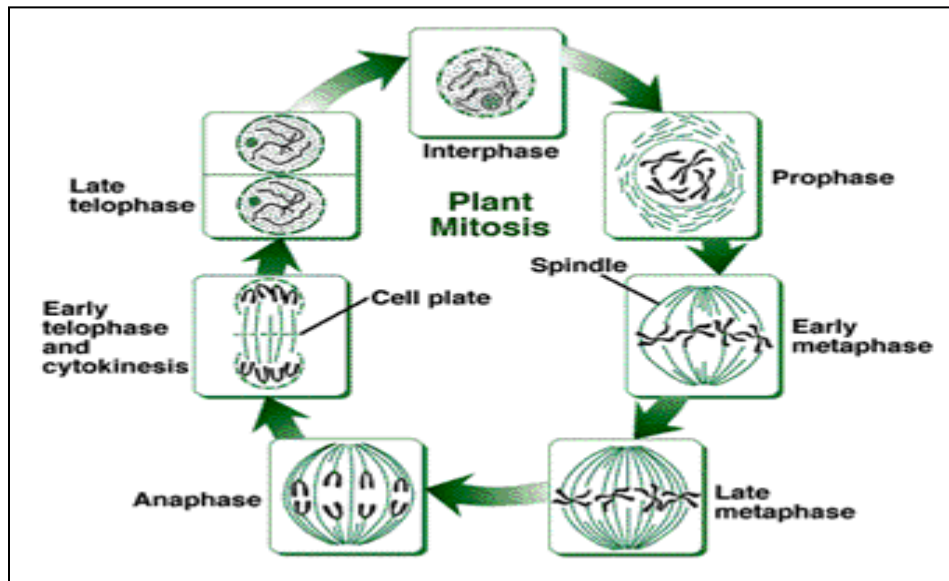


STAGES OF MITOSIS IN ANIMAL CELL

***THERE IS ONLY TWO MAJOR DIFFERENCE BETWEEN PLANT & ANIMAL CELL DURING MITOSIS-

1) ASTERS ARE NOT FORMED IN PLANT CELL BUT ARE PRESENT IN ANIMAL CELL

2) CYTOKINESIS OCCURS BY FURROWING IN ANIMAL CELL & CELL PLATE FORMATION IN PLANT CELL.



STAGES OF MITOSIS IN PLANT CELL

ANAPHASE

- ❖ Centromere attaching the two chromatids divides.
- ❖ The two sister chromatids of each chromosome separate & are drawn apart towards opposite poles pulled by shortening of spindle fibres.

TELOPHASE

- ❖ Two sets of daughter chromosomes reach opposite poles.
- ❖ Spindle fibres disappear.
- ❖ Chromatids thin out in the form of chromatin fibres.
- ❖ Nuclear membrane is formed.
- ❖ The cleavage furrow starts deepening in the animal cell & cell plate starts to form in plant cell.
- ❖ Nucleoli reappear.

With this ends the **Karyokinesis (the division of nucleus)** because so long nucleus division was occurring. After this starts **cytokinesis (division of cytoplasm)** for complete separation of cells.

CYTOKINESIS

- ❖ Cleavage furrow deepens totally in animal cell & cell plate completely formed in plant cell.
- ❖ The two daughter cells separates.

✚ HUMANS HAVE 46 CHROMOSOMES IN EACH CELL.

▪ “ MITOSIS IS KNOWN AS EQUATIONAL DIVISION “ – WHY

Mitosis is the process of cell division wherein the chromosomes replicate & get equally distributed into the two daughter cells. The chromosome number in each daughter cell is equal to that in the parent cell , i.e., diploid. Hence mitosis is known as equational division.

SOME RELATED TERMS –

ASTER – aster is a cellular shaped like structure consisting of a centrosome & its associated microtubules.

CENTRIOLE – centriole is a cell structure composed mainly of protein ,located in the cytoplasm near the nuclear envelope.

SPINDLE – a fan like microtubule structure formed during cell division that helps separate the chromosomes to the opposite ends.

CENTROSOME – structure containing two centrioles which move towards the opposite pole & forms spindle fibres during cell division.

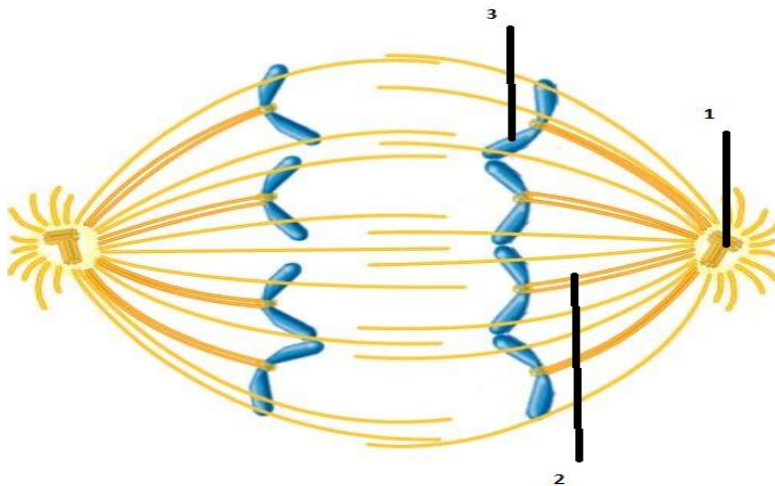
CENTROMERE – the point of attachment of two sister chromatids.

ASSIGNMENT 1 (CONTINUATION OF THE ASSIGNMENT OF CHAPTER CELL CYCLE & CELL DIVISION)

6) Differentiate between centrosome & centromere (definition).

7) Why is mitosis called equational division?

8)



- 1) Name the parts labelled 1,2 & 3
- 2) Identify the stage above & give reason to support your answer.
- 3) Mention where in the body this type of cell division occurs.
- 4) Name the stage prior to this stage and draw its diagram with proper labeling.

Chemistry Class 10

Please follow the audio lesson as well as the previous pdf files to answer these questions. These questions are from the chapter **Acid, bases and salts**

Chapter at a glance:

- Acids give hydronium ion on dissociation
- Bases give hydroxyl ion on dissociation
- Based on no. of hydronium ion acid can be class which is known as Basicity of an acid
- Based on no. of hydroxyl ion bases can be classified which is known as acidity of base
- PH value can be used to understand the nature of any solution
- It is a scale from 0 to 14.7 being neutral below 7 is acidic and above 7 is basic.
- Acid and base react to form salt and water.
- The hydrogen ion of acid gets replaced with metal or ammonium ion of the base to form salt
- There are 6 types of salt: normal, acid, basic, complex, double and mixed salts.
- Most salts are soluble except for carbonates, sulphides, sulphites and phosphates.
- The phenomenon due to which salt formed by a weak acid and a strong base or by strong acid and weak base reacts with water to give acidic or an alkaline solution is hydrolysis.
- Soluble salts are prepared in solution form
- Insoluble salts are prepared usually by precipitation method.
- Other methods can be synthesis, addition of dil acid on an insoluble base, action of acid on active metal.
- Neutralisation is the process of reacting with acid and bases to form salt and water
- Neutralisation is a useful method of preparing the soluble salts of sodium, potassium and ammonium..

ASSIGNMENT

1. Salts of strong acids and strong base in water produce 1).....solution.Solution of sodium carbonate in water is 2).....in nature while solution of ferric chloride is 3).....in nature.
2. A solution A turns red litmus blue and solution B turns blue litmus red.So A must containion and B must contain.....ion.When A,B are mixed the products will be..... and.....
3. An example of mineral acid is.....
4. The Basicity of acetic acid is.....
5. A chemical reaction between hydronium ion of an acid and hydroxyl ions of a base is called.....
6. An acid which contain 4 hydrogen atom in it is.....
7. The metal oxide which can react with acid as well as alkali is.....
8. An organic weak acid is.....
9. A dibasic acid containing sulphur is.....
10. Two gases one basic and another acid combine to give solid are.....