

INTRODUCTION & HOME ASSIGNMENT No- 6
CLASS-V SUB-SCIENCE
CHAPTER 2 - SOLIDS, LIQUIDS, AND GASES

DATE-28/4/2020

SOLUBLE AND INSOLUBLE SUBSTANCES

(Substances that dissolve completely in a liquid to form a solution are called **soluble substances**.) For example, sugar and salt are soluble in water. (Substances that do not dissolve in a liquid are called **insoluble substances**.) For example, sand and chalk are insoluble in water.

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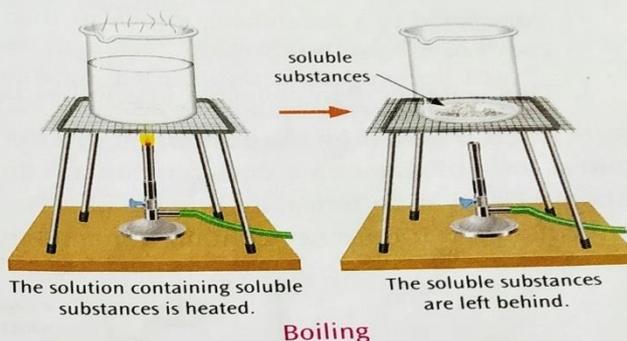
SEPARATION OF LIQUIDS FROM SOLIDS

Soluble and insoluble solutes can be separated from solvents using different methods.

Separation of soluble substances

We can remove soluble substances from a liquid (say water) by methods such as boiling and distillation.

Boiling In this process, the solution containing soluble impurities, such as salt and sugar, is heated till the water evaporates, leaving behind salt, sugar, or any other soluble substances. During this process, water is lost through boiling.



Boiling

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Activity

Aim: To separate soluble substances by boiling.

Materials: A Bunsen burner, a stand, a beaker, wire mesh, about 50 ml of salt solution, matches.

Procedure:

[**Note:** As this activity requires heating, it should only be done in the presence of your teacher/an adult.]

1. Place a stand above the bunsen burner. Keep a wire mesh over it.
2. Now place the beaker on the wire mesh.
3. Pour salt solution into it.
4. Let your teacher/an adult light the burner using the matches.
5. Heat continuously until water evaporates from the beaker.
6. Now, switch off the burner and allow the beaker to cool down. Note what is left behind in the beaker.

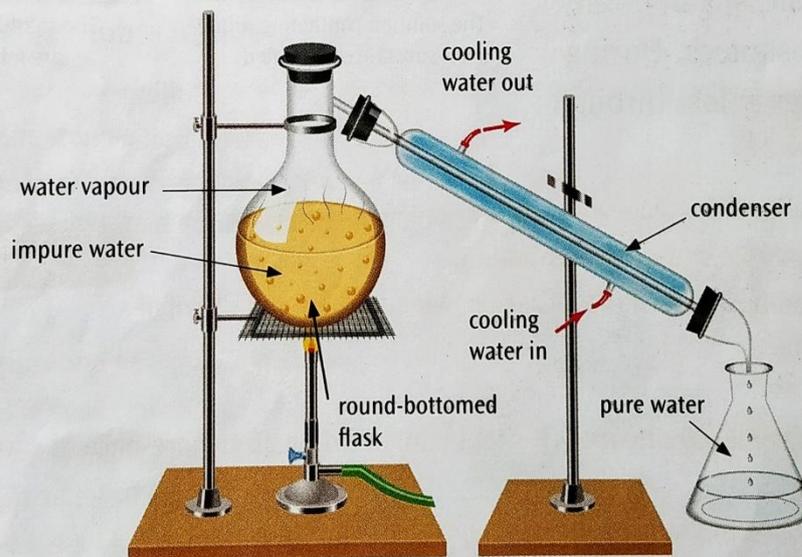
Observation: Water has evaporated and salt is left behind in the beaker.

Conclusion: Salt is the solute which is soluble in water (solvent). We have separated salt from its solution through boiling. Thus, boiling can be used to separate soluble impurities from a solution.

Distillation This method is generally performed in laboratories to remove soluble impurities from water. This method involves the following steps.

1. Impure water is taken and is heated in a round-bottomed flask.
2. On heating, water evaporates as water vapour and the impurities are left behind. The water vapour then reaches the neck of the round-bottomed flask connected to a condenser, which further cools it. The water vapour now condenses into liquid water.
3. This water is then collected in another flask attached to the condenser.

Pure water collected by the distillation process is called **distilled water**. It is the purest form of water as it does not contain any impurities. Distilled water is used in laboratories, car batteries, and medicines. However, distilled water is not suitable for drinking as it does not contain minerals that are present in drinking water.



Distillation

Separation of insoluble substances

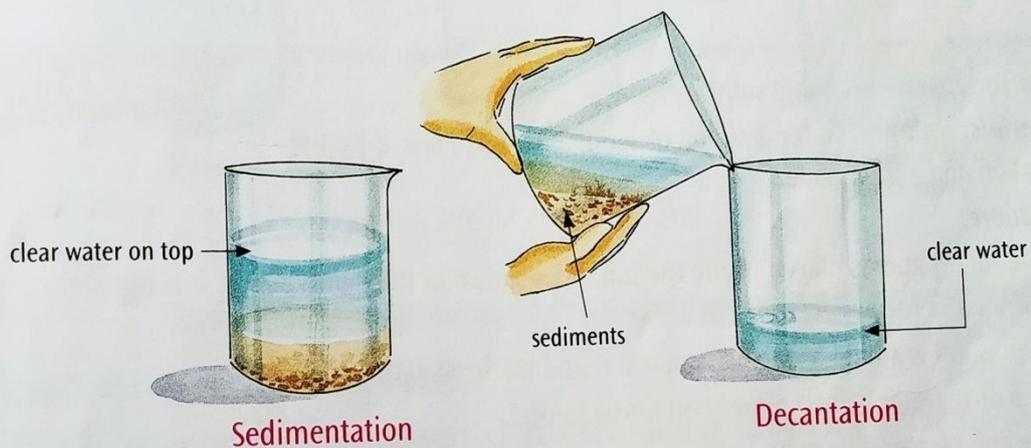
Insoluble substances, such as mud and sand, can be removed by sedimentation followed by decantation or filtration.

Sedimentation and decantation In sedimentation, insoluble substances in a liquid settle down at the bottom of a container. The substances that settle down

are called **sediments**. Sedimentation involves the following steps:

- i. Impure water, containing mud, is collected from a pond in a beaker.
- ii. The water is allowed to stand undisturbed in the beaker for a while.
- iii. After some time, the mud settles down at the bottom of the beaker as sediment. This process is called **sedimentation**.

Water above the mud or sand layer is almost clear. This water can then be poured out into a separate container without disturbing the sediments. The process of removing the clear water after the sediments have settled down is called **decantation**.



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Activity

Aim: To separate insoluble substances from water by sedimentation and decantation.

Materials: A glass of water, one spoon of sand, an empty glass or beaker, and a table.

Procedure:

1. Place the glass or beaker containing water on the table.
2. Add the sand and stir it with the spoon.
3. Let it stand for 15 minutes.

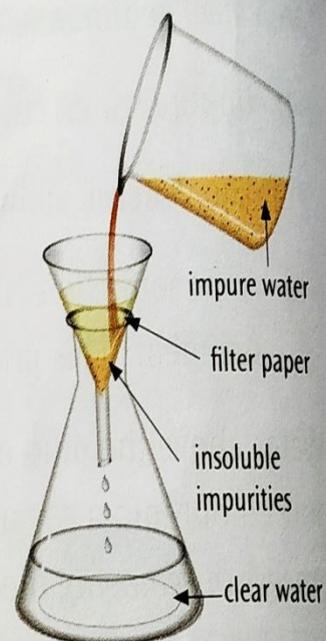
Observation: The sand settles down at the bottom of the glass after 15–20 minutes. Water transferred to another glass is somewhat clear and generally does not contain sand.

Conclusion: Sand is an insoluble impurity in water. It is heavier than water so it settles down at the bottom of the glass. This process is called **sedimentation**. Then, the clear water is transferred to another glass without disturbing the sediment. This process is called **decantation**.

Filtration In filtration, the insoluble substances can be removed by passing the solution (say, impure water) through a filter paper. While the insoluble substances are retained on the filter paper, the clear water passes through it and is collected in the flask below.

The process of separating insoluble substances by passing the solution through filter paper is called filtration.

This is a better method of removing insoluble substances than sedimentation and decantation.



Filtration

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Activity

Aim: To separate insoluble substances by filtration.

Materials: A glass of water, a spoon of sand, an empty glass, a funnel, a beaker, and a filter paper.

Procedure:

1. The filter paper is placed inside the funnel as shown in the figure above. It is moistened by letting it absorb a few drops of water.
2. Next, sand is added to the glass of water and is stirred with a spoon.
3. This dirty water is then poured on to the funnel.
4. The clear water (filtrate) is collected in the beaker placed just below the funnel.

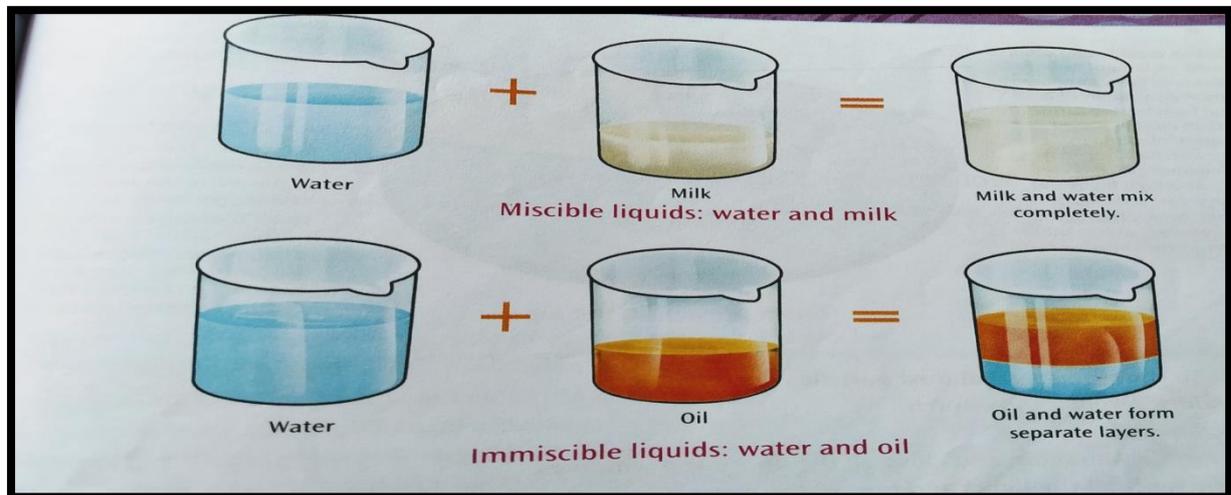
Observation: The water collected in the beaker is clean.

Conclusion: The filter paper acts a filter and sand particles get trapped in it. The water comes out clean. This process is called filtration. This process is used to separate larger sized insoluble substances from liquids.

MISCIBLE AND IMMISCIBLE LIQUIDS

When two liquids, such as water and milk, are combined together and they completely mix with each other, they are called **miscible liquids**. However, there are certain liquids that do not completely mix with each other. These liquids are called **immiscible liquids**.

When two immiscible liquids are mixed, the lighter liquid floats on the top of the heavier liquid. Oil and water are immiscible liquids. Oil is lighter than water, so it floats on the surface of water.



NOTE: You have to read the activities also, which I have given. Later you need it for science practical. Practice the diagram of- **Sedimentation, Decantation and Filtration.**

Note: For further information & better understanding you can go through this link-

<https://www.youtube.com/watch?v=XtbSxfoDbZs>

<https://www.youtube.com/watch?v=c3r2BUGhvbs>

<https://www.youtube.com/watch?v=9TR1Q-O5YwA>

HOME WORK

DATE-28/4/2020

1.Name the following:-

- a) Anything that has mass and occupies space-
- b) The state of matter in which particles are highly packed-
- c) Milk and water are examples of this state of matter-

2. Write "True" and " False" for the following statements:-

- a) The substance that gets dissolved in a solution is called solvent.
- b) Soluble substance can be removed from a solution by filtration.
- c) Liquids that do not completely mix with each other are called immiscible liquids.

Date: 28/04/2020

CLASS-V

PHYSICAL EDUCATION

YOGA

GARUDASANA (Eagle Pose):

The “Garudasana” comes from the Sanskrit words ‘garuda’ meaning ‘eagle’ and ‘asana’ meaning ‘posture’ or ‘seat’.

Instructions



floor.

1. Begin standing in Mountain Pose (Tadasana), with your arms at your sides.
2. Bend your knees. Balance on your right foot and cross your left thigh over your right. Fix your gaze at a point in front of you. Hook the top of your left foot behind your right calf. Balance for one breath.
 - Beginners can omit the foot hook and cross the leg over the top of the standing leg, instead, resting the toes gently on the
3. Extend your arms straight in front of your body. Drop your left arm under your right.
4. Bend your elbows, and then raise your forearms perpendicular to the floor. Wrap your arms and hands, and press your palms together (or as close as you can get them).

Lift your elbows and reach your fingertips toward the ceiling. Keep your shoulder blades pressing down your back, toward your waist.

- If your palms don't touch yet, press the backs of your hands together, instead, or hold onto a strap.
5. Square your hips and chest to the front wall. Draw your belly in and up.
 6. Gaze at the tips of your thumbs. Breathe smoothly and evenly.

Benefits of Eagle Pose

- 1.Stronger arms, legs, knees and ankles.
- 2.Open shoulder joints, creating space between the shoulder blades.
- 3.Open hips and IT band.
- 4.Increased circulation to all joints.
- 5.Improved digestion and elimination.
- 6.Improved balance.
- 7.Improved focus.

Click on the below link for Eagle Pose:

<https://youtu.be/9wwtGegsD4E>

CLASS –V

SUBJECT : ENGLISH LANGUAGE

STUDY MATERIAL NO 8

CHAPTER ARTICLES

28/4/2020

Answer Key

1. I bought a ✓ pair of shoes.
2. I saw a ✓ movie last night.
3. They are staying at a ✓ hotel.
4. Look at the ✓ woman over there! She is a famous actress.
5. I do not like X ✓ basketball.
6. That is the ✓ girl I told you about.
7. The ✓ night is quiet. Let's take a walk!
8. The ✓ price of gas keeps rising.
9. John travelled to X ✓ Mexico.
10. Juan is X ✓ Spanish.
11. I read an ✓ amazing story yesterday.
12. My brother does not eat X ✓ chicken.
13. X ✓ love is such a ✓ beautiful thing.
14. I live in an ✓ apartment. The ✓ apartment is new.
15. I would like a ✓ piece of cake.
16. I was in a ✓ Japanese restaurant. The ✓ restaurant served good food.
17. Sara can play the ✓ guitar.

CLASS-V

SUBJECT : ENGLISH LANGUAGE

CHAPTER- PRONOUNS

STUDY MATERIAL NO 8

28/4/2020

A **pronoun** is a word used in a place of a noun.

PRONOUN EXAMPLES

Some examples of pronouns are –

I, we, they, you, he, mine, yourself, her.

PRONOUN TYPES

The following are the various types of pronouns:-

1. Personal Pronoun
2. Demonstrative pronoun
3. Possessive Pronoun
4. Reflexive pronoun
5. Interrogative pronoun
6. Emphasising pronoun

Let us discuss them one by one in detail –

Kinds of Pronoun - Personal Pronoun

Personal pronouns are used for particular nouns such as the names of people, places or things. Personal pronouns are usually used when we have already mentioned the name of the same noun to avoid the repetition and to bring flow in the sentence.

For example:

- Dia bought a new bag yesterday. She absolutely loves it.

In the second sentence, there are two personal pronouns. The personal pronoun "She" is used in the place of "Dia" and "it" is used in the place of "bag."

Rules of personal pronoun

Number - singular or plural

Person – **First person** (This includes the speaker himself or a group that includes the speaker, i.e., I, me, we, and us.)

Second person - (This includes the speaker's audience, i.e., you.)

Third person (This includes everybody else, i.e., he, she, it, they.)

Gender - male, female, or neuter

Case - subject or an object

Subject Pronouns are the personal pronouns (I, you, he, she, it, they, and we) that are used in the place of nouns as the subject of a sentence. **Example:** Ms. Dia did not come to office. She had to go to the dentist. Here, "Ms. Dia" is the subject and "she" is the subject pronoun.

Object pronouns are the personal pronouns (me, you, him, her, it, us, and them) that take the place of the object in the sentence (i.e. the noun that receives the action in a sentence). **Example:** Dia went market with her friend. "Her" is the object pronoun used here.

Subject Pronoun	It	You	What	I	He	She	We	Who
Object Pronoun	It	You	What	Me	Him	Her	Us	Whom

Possessive Pronouns: mine, yours, his, hers, theirs, ours, its, whose

Here are examples of personal pronouns.

1. You need to stop worrying me.
2. We would love to join you.
3. I want you to read this magazine.
4. You are the fastest baller in our team.
5. They talked to me about current situation of the company.
6. We enjoyed listening to her song.

Pronouns Chart

Case	Subject		Object		Possessive	
Number	Singular	Plural	Singular	Plural	Singular	Plural
1 st Person	I	we	me	us	my, mine	our, ours
2 nd Person	you	you	you	you	Your, yours	Your, yours
3 rd Person	He, she, it	they	Him, her, it	them	His, her, hers, its	their, theirs

Pronouns are words used to avoid the repetition of nouns. Examples are: **I, we, you, they, them, his, her, their etc.**

Fill in the blanks with appropriate pronouns.

1. Rani is a pretty girl. is quite proud of good lucks.
2. Manu is an engineer. builds aeroplanes.
3. My grandfather is eighty years old. can still read without glasses; however, can't walk that much.
4. I have invited Mira and her brother to dinner. have promised to come.
5. Rahul can't watch TV before finishes homework.
6. The teacher asked me if knew the answer.
7. The players were upset when lost the match. The coach consoled
8. I have a parrot. can speak.
9. The dog wagged tail to show happiness.
10. The baby was hungry. started crying.

Fill in the blanks with suitable pronouns.

1. John and Peter are brothers. I know very well and my father likes very much.

2. This book has many interesting pictures and stories. I like
..... very much.

3. The woman gave sweets to the children, but did not thank
.....

4. The teacher said, 'John, you're a naughty boy. don't obey
.....'

5. The boys were late so the teacher scolded

6. We have a good teacher. advised
to work harder.

7. My father told my mother, 'I want to take these jewels
and put in a box. When have done that
come and see and will tell
..... why don't want
.. to keep in that box.'

27/4/20 → Home assignment No-6 (Solution)

Class - V Sub: Mathematics

Ch- 2 Operation on large Number Solution

Date: 28/4/2020

1) a) $41,725 \times 386$

$$\begin{array}{r} 41725 \\ \times 386 \\ \hline 250350 \\ 333800 \\ + 125175 \\ \hline 16105850 \end{array}$$

Ans: $41725 \times 386 = 1,61,05,850$

1) b) 26380×100

$= 2638000$ (Ans)

1) c) $63305 \times 10,000$

$= 633050000$ (Ans)

2) a) If 7280 sample copies of books were distributed among 520 dealers, how many books did each dealer get?

↳ Total sample copies of the book = 7280
Copies have to distribute among 520 dealers

∴ Each dealer get = $(7280 \div 520)$ books
 $= 14$ books

$$\begin{array}{r} 520 \overline{) 7280} \quad (14) \\ \underline{520} \\ 2080 \\ \underline{2080} \\ \hline \end{array}$$

Ans: Each dealer get 14 books.

2) b) A factory produces 15,436 toys every month. How many toys are produced in a year?

↳ We know, 1 year consist 12 months

∴ In 1 year the factory produce (15436×12) toys
 $= 185232$ toys

Ans: The factory produce 1,85,232 toys in a year.

$$\begin{array}{r} 15436 \\ \times 12 \\ \hline 185232 \end{array}$$

3) a) $4791 \times 100 = 479100$

3) b) $50 \times 10 = 500$

3) c) $4 \times 10000 = 40000$

HOME ASSIGNMENT No.- 7

Class - V Sub: Maths

Ch-3 Fractions

Date: 28/4/2020

Theme 3: Fractions and Decimals



Fractions

Let's Revise

1. A fraction represents a part of a whole.

$$\frac{2}{5}$$

2 ← Numerator
5 ← Denominator

2. In a proper fraction, the numerator is less than the denominator.

$$\frac{2}{5}$$

Numerator is less } Proper
Denominator is more } Fraction

3. In an improper fraction, the numerator is equal to or larger than the denominator.

$$\frac{5}{2}$$

Numerator is more } Improper
Denominator is less } Fraction

4. Fractions that have same value are called equivalent fractions. Equivalent fractions can be formed by multiplying or dividing both the numerator and denominator of a fraction by the same number.

$$\frac{2}{5} = \frac{2 \times 2}{5 \times 2} = \frac{4}{10}; \quad \frac{8}{40} = \frac{8 \div 4}{40 \div 4} = \frac{2}{10}$$

Here, equivalent fractions are $\frac{2}{5}$ and $\frac{4}{10}$; $\frac{8}{40}$ and $\frac{2}{10}$.

5. The fractions which have the same denominator are called like fractions.

Examples: $\frac{2}{7}$ and $\frac{3}{7}$

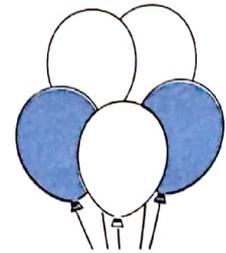
6. The fractions which have different denominators are called unlike fractions.

Examples: $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{7}$

7. When we add or subtract like fractions, we first add or subtract the numerator, then we write the sum or difference over the denominator.

Example 1: $\frac{2}{5} + \frac{1}{5} = \frac{2+1}{5} = \frac{3}{5}$

Example 2: $\frac{7}{8} - \frac{5}{8} = \frac{2}{8}$



Converting Improper Fractions and Mixed Numbers



When an improper fraction is written such that the whole number and fractional numbers are placed side by side, it is called a **mixed number**.

$$\begin{aligned} \text{○} + \text{○} &= \frac{2}{2} + \frac{1}{2} = \frac{3}{2} = \text{Improper Fraction} \\ \text{or} \\ 1 + \frac{1}{2} &= 1\frac{1}{2} = \text{Mixed Number} \end{aligned}$$

$$\begin{aligned} \text{○} + \text{○} &= \frac{4}{4} + \frac{3}{4} = \frac{7}{4} = \text{Improper Fraction} \\ \text{or} \\ 1 + \frac{3}{4} &= 1\frac{3}{4} = \text{Mixed Number} \end{aligned}$$

Example 1: Convert $\frac{22}{4}$ into a mixed number.

Step 1: Divide the numerator by the denominator.

Step 2: Write in the form of Quotient $\frac{\text{Remainder}}{\text{Divisor}}$

Hence, $\frac{22}{4} = 5\frac{2}{4}$

$$\begin{array}{r} \text{Divisor} \\ \downarrow \\ 4 \overline{)22} \\ \underline{-20} \\ 2 \end{array} \begin{array}{l} \leftarrow \text{Quotient} \\ \leftarrow \text{Remainder} \end{array}$$

Example 2: Convert $6\frac{1}{5}$ into an improper fraction.

Step 1: Multiply the whole number by the denominator, that is, $6 \times 5 = 30$

Step 2: Add the numerator to the product, that is, $30 + 1 = 31$



Step 3: Write the sum obtained over the denominator, that is, $\frac{31}{5}$

Hence, $6\frac{1}{5} = \frac{31}{5}$

Comparison of Fractions

Comparison of Like Fractions

To compare like fractions, numerators of the fractions are compared. The fraction having greater numerator is the greater fraction.

Example 1: Compare $\frac{2}{5}$ and $\frac{3}{5}$.

Solution: $\frac{2}{5}$ and $\frac{3}{5}$ are like fractions, that is, both have the same denominator.

So, compare the numerators. On comparison, we find that $3 > 2$.

Hence, $\frac{3}{5} > \frac{2}{5}$.

Comparison of Unlike Fractions

There are two methods to compare unlike fractions. They are given below:

- (a) Comparison by converting into like fractions
- (b) Comparison by cross-multiplication

Comparison by Converting into Like Fractions

In this method, we change the fractions such that their denominators become same. The resulting fractions then become like fractions and can be compared as like fractions.

Example 1: Compare $\frac{3}{10}$ and $\frac{1}{5}$.

Solution: Convert $\frac{1}{5}$ to a like fraction as given below.

$$\frac{1}{5} = \frac{1 \times 2}{5 \times 2} = \frac{2}{10} \text{ [Multiplying numerator and denominator by the same number]}$$

Now, the given fractions $\left(\frac{3}{10} \text{ and } \frac{2}{10}\right)$ are like fractions.

On comparing the numerators, we get $3 > 2$.

Therefore, $\frac{3}{10} > \frac{2}{10}$ or $\frac{3}{10} > \frac{1}{5}$. $\left[\text{As } \frac{2^1}{10_5} = \frac{1}{5} \right]$

A fraction whose numerator is 1 and denominator is a positive integer is called unit fraction.

Comparison by Cross-multiplication

In this method, we multiply the numerator (Nr) of the first fraction with the denominator (Dr) of the second fraction and vice versa.

If $\text{Nr (1st fraction)} \times \text{Dr (2nd fraction)} > \text{Dr (1st fraction)} \times \text{Nr (2nd fraction)}$, then the first fraction is greater. Otherwise, the second fraction is greater.

Example 1: Compare $\frac{4}{5}$ and $\frac{2}{3}$.

Solution: We cross multiply the two fractions as

$$\begin{array}{l} \frac{4}{5} \quad \times \quad \frac{2}{3} \quad \rightarrow \quad 4 \times 3 = 12 \\ \quad \quad \quad \quad \quad \quad \rightarrow \quad 5 \times 2 = 10 \end{array}$$

Here $12 > 10$.

Hence, $\frac{4}{5} > \frac{2}{3}$.



Arranging Fractions in Ascending and Descending Order

Example 1: Arrange the fractions $\frac{3}{8}$, $\frac{5}{6}$, $\frac{7}{12}$ in ascending order.

Solution: First, let's find the LCM of the denominators. LCM of 8, 6 and 12 is 24.

Now, we have to convert the fractions to equivalent fractions.

$$\frac{3}{8} \times \frac{3}{3} = \frac{9}{24}, \quad \frac{5}{6} \times \frac{4}{4} = \frac{20}{24}, \quad \frac{7}{12} \times \frac{2}{2} = \frac{14}{24}$$

Now, arrange the equivalent fractions in ascending order of numerators.

$$\frac{9}{24} < \frac{14}{24} < \frac{20}{24} \text{ or } \frac{3}{8} < \frac{7}{12} < \frac{5}{6}$$

Example 2: Arrange the fractions $\frac{6}{11}$, $\frac{3}{4}$, $\frac{7}{8}$ in descending order.

Solution: Find the LCM of the denominators. LCM of 11, 4 and 8 is 88.

Now, change the fractions to equivalent fractions.

$$\frac{6}{11} \times \frac{8}{8} = \frac{48}{88}, \quad \frac{3}{4} \times \frac{22}{22} = \frac{66}{88}, \quad \frac{7}{8} \times \frac{11}{11} = \frac{77}{88}$$

Now, arrange the equivalent fractions in descending order of numerators.

$$\frac{77}{88} > \frac{66}{88} > \frac{48}{88} \text{ or } \frac{7}{8} > \frac{3}{4} > \frac{6}{11}$$

Some more examples

1. a) Change the mixed number into improper fractions.

$$6\frac{1}{3} = \frac{18+1}{3} = \frac{19}{3} \text{ (Ans)} \quad \left[\begin{array}{l} \text{we can write the answer in} \\ \text{one step also.} \end{array} \right]$$

2. a) Change the fractions into mixed numbers

$$\frac{7}{2} = \frac{7}{2} \left(\frac{6}{2} + \frac{1}{2} \right) \therefore \frac{7}{2} = 3\frac{1}{2} \text{ (Ans)}$$

3. a) Compare the given like fractions and fill in the blank boxes using $>$ or $<$.

$$\frac{4}{9} \square \frac{7}{9} \quad \left[\begin{array}{l} \because \text{Denominator are same and} \\ \text{we know } 4 < 7 \\ \therefore \frac{4}{9} < \frac{7}{9} \end{array} \right]$$

4. a. Compare the given unlike fractions and fill in the blank boxes using $<$ or $>$.

$$\frac{2}{3} \square \frac{5}{6} \quad \rightarrow \left[\begin{array}{l} \text{We have to make the two denominator} \\ \text{same so we have to multiply 3 with 2} \\ \text{so that it become 6.} \end{array} \right]$$

$$\frac{2}{3} = \frac{2 \times 2}{3 \times 2} = \frac{4}{6}$$

Now, the given fractions $\left(\frac{4}{6} \text{ and } \frac{5}{6}\right)$ are like fractions.

We know, $4 < 5$

$$\text{Therefore, } \frac{4}{6} < \frac{5}{6} \text{ or } \frac{2}{3} < \frac{5}{6}$$

$$\therefore \frac{2}{3} \square \frac{5}{6} \text{ (Ans)}$$

5. Arrange the fractions $\frac{3}{4}$, $\frac{1}{8}$, $\frac{7}{12}$ in ascending order.

\hookrightarrow L.C.M of 4, 8, 12 (the denominators) = 24

$$\begin{array}{r} 2 \overline{) 8, 4, 12} \\ \underline{2 \overline{) 4, 2, 6}} \\ 2, 1, 3 \end{array}$$

$$\therefore \frac{3 \times 6}{4 \times 6} = \frac{18}{24}; \frac{1 \times 3}{8 \times 3} = \frac{3}{24}; \frac{7 \times 2}{12 \times 2} = \frac{14}{24}$$

$$\therefore \text{LCM} = 2 \times 2 \times 2 \times 3 = 24$$

$$\therefore \frac{3}{24} < \frac{14}{24} < \frac{18}{24}$$

$$\text{So, } \frac{1}{8} < \frac{7}{12} < \frac{3}{4} \text{ (Ans)}$$

Home Work (Ch-3)

28/4/2020

1. Change the following mixed numbers into improper fraction :-

a) $4\frac{3}{7}$

2. Change the fraction into mixed number

a) $\frac{11}{3}$

3. Compare the given like fraction and fill in the blank using $>$ or $<$

a) $\frac{6}{11} \square \frac{8}{11}$

4. Compare the given unlike fraction and fill in the blank using $>$ or $<$

a) $\frac{5}{6} \square \frac{7}{12}$

5. Arrange the fractions in descending order

a) $\frac{7}{9}, \frac{8}{15}, \frac{5}{6}$

CLASS-5
COMPUTER
DATE-28.4.20
SOLUTION OF 1st & 2nd HOME ASSIGNMENT OF CHAPTER-1
(EVOLUTION OF COMPUTERS)

ANSWER SHEET(1st Home assignment + 2nd home assignment)

A. Answer the following questions:

1. What do you mean by generations of computers?

Ans- A generation in computer terminology refers to the change in the technology of a computer's processing unit. Each generation of computers is characterized by a major technological development that fundamentally changed the way computers operate. This resulted in increasingly smaller, cheaper, more powerful, more efficient and reliable computing devices. The generation of computers are distinguished based on the technological developments in a computer's processing unit.

2. Write in brief about Analytical engine.

Ans- Charles Babbage designed the world's first general purpose computer called the Analytical Engine.

The Analytical Engine had all the following elements that a modern computer would have today:

- A Processor- the processor engine consisted of hundreds of axles and thousands of gears and was around 10 feet tall.
- A control Unit- Slats (thin metallic strips) and studs (large headed nails) were used to control the processor.
- Storage- A unit that contained additional axles & various gears holding one thousand 50 digit numbers was used for storage.
- An Input Device- A form of punched cards supplied input.
- An Output Device- Plates were created to fit in a printing press to print results.

The logical structure of the Analytical Engine was essentially the same as that which has dominated computer design in the electronic era. The analytical Engine is one of the most successful achievements of Charles Babbage.

B. Write the full forms :

1. ABC- Atanasoff-Berry Computer
2. ENIAC- Electronic Numerical Integrator & Computer
3. UNIVAC- Universal Automatic computer
4. EDSAC- Electronic Delay Storage Automatic Calculator
5. PDP-1- Programmed Data Processor-1
6. RAM- Random Access Memory

C. Fill in the blanks:

1. Colossus was the first electric programmable computer.
2. Alan Turing, a famous mathematician & computer scientist, described the principle of modern computer.

DATE-28.4.20

CLASS-5
COMPUTER
CHAPTER-1 (EVOLUTION OF COMPUTERS)
3RD HOME ASSIGNMENT

The First Desktop Computer

Programma 101 was the first commercial desktop personal computer. It was invented by the Italian engineer Pier Giorgio Perotto.

NASA bought at least ten Programma 101 and used them for the calculations during the 1969 Apollo 11 Moon landing. The ABC Network used Programma 101 to predict the Presidential election of 1968 and the U.S. military used the machine to plan their operations in the Vietnam War.

First Microprocessor

Intel 4004 was a 4-bit central processing unit (CPU) released by Intel corporation in 1971. It was the first commercially available microprocessor by Intel.

First Microprocessor

According to the Computer History Museum, the Micral N was the earliest commercial personal computer based on Intel 8008 microprocessor. It was the first commercial non-assembly computer.

First Personal Computer'

John Blankenbaker's Kenbak-1 was the winner of the Computer museum's 'Earliest PC Contest'.

It used small-scale & medium-scale integrated circuits. It also had 256 bytes of memory.

First Laptop or Portable Computer

IBM 5100 Portable Computer was introduced in 1975. It weighed about 25 kg and was the size of a small suitcase. It needed external power to operate.

Osborne1, released in June 1981 by the Osborne Computer Corporation, is considered to be the first portable, fully featured computer.

It had all the components required to be a completely useful & operational computer system.

- Two in-built floppy drives that could hold 91k of data each, with floppy disk storage compartments
- A detachable full-size keyboard with a numeric keypad
- An in-built, though small, monochrome CRT monitor.

First Multimedia Computer

Tandy Corporation launched its first multimedia computer in May 1991. They were desktop models that allowed users to incorporate stereo sound, animated graphics, photographs & text into their programs.

The machines were also the first PCs to use a new version of Microsoft Corporation's popular Windows software. They had in-built compact disc drives and

offered multimedia features.

A. Answer the following questions:

1. What is multimedia computer?
2. Write in brief about First Laptop or Portable Computer.

B. Fill in the blanks:

1. _____ was the first commercial desktop personal computer.
2. _____ was a 4-bit central processing unit (CPU) released by Intel corporation in 1971.