INTRODUCTION & HOME ASSIGNMENT No- 7
CLASS-V SUB-SCIENCE
CHAPTER 2 - SOLIDS,LIQUIDS, AND GASES

DATE-30/4/2020

HOME WORK SOLUTION of- 28/4/2020

1.Name the following:-

a) Anything that has mass and occupies space- Matter

b) The state of matter in which particles are highly packed- Solid

c) Milk and water are examples of this state of matter- Liquid

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

a) The substance that gets dissolved in a solution is called solvent. False

b) Soluble substance can be removed from a solution by filtration. False

c) Liquids that do not completely mix with each other are called immiscible liquids. True

INTRODUCTION & HOME ASSIGNMENT No- 7
CHAPTER 2 - SOLIDS,LIQUIDS, AND GASES

Date:30/4/2020

AIR:

Air is a mixture of several gases-78% of it is **nitrogen** and 21% of it is **oxygen**. Rest of it comprises other gases such as carbon dioxide , argon, helium, hydrogen etc. Water vapour is also present in the air. **The amount of water vapour present in the air at a particular time is called humidity.** Air also contains dust particles and smoke.

PROPERTIES OF AIR:

The following are the properties of air-
i) Air occupies space.
ii) Air exerts pressure.
iii) Air is needed for burning.
iv) Air has weight.

AIR RISES ON HEATING

Another important property of air is that warm air is lighter than cold air. Because of this, when air gets heated, it rises up. This property leads to the formation of wind.

Formation of wind

Sun's heat causes the air to become warm. As the warmer air is lighter, it starts rising up. The cooler air, being heavier than the warmer air, starts moving in to take its place. This causes wind. *The moving air is called* ***wind****. A gentle wind is called a* ***breeze****. A strong wind is called a* ***gale****. A very strong and powerful wind with rain is called a* ***storm****. A storm that occurs with thunder and lightning is called a* ***thunderstorm****.* Wind affects the weather of a place.

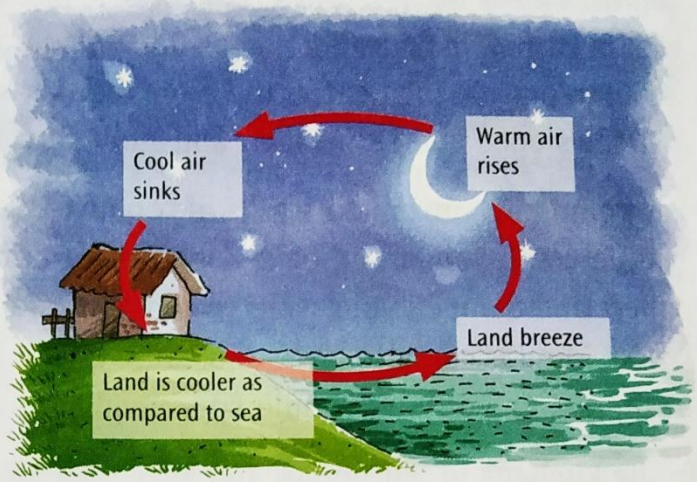
Sea and land breezes

During the day, the land heats up faster than the sea, and so does the air above the land. Since warm air is lighter, the air above the land rises. The cooler and heavier air above the sea rushes over

Sea breeze

the land to fill up the space. *The cooler air that moves from the sea towards the land during daytime is called* ***sea breeze***.

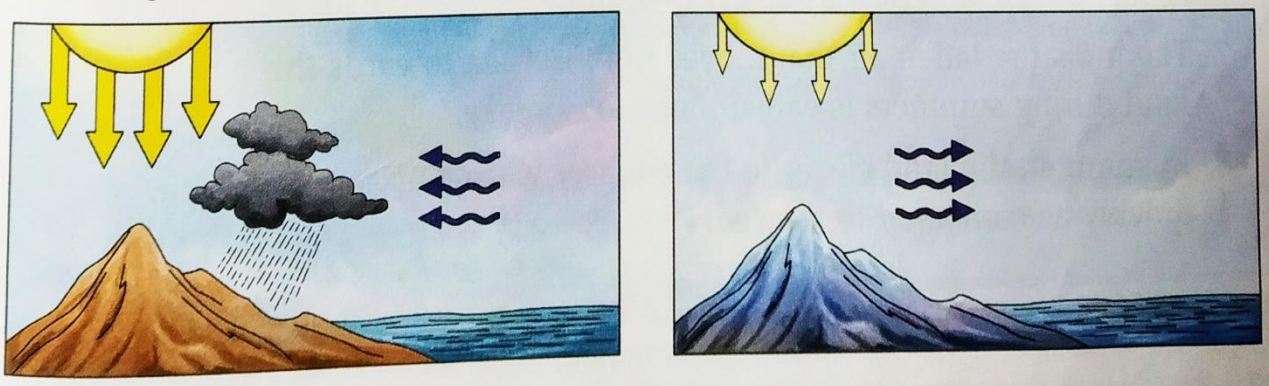
During the night, the land cools down faster than the sea. Since the sea is warmer than the land at night, the air above the sea also remains warm. The warm air is lighter and rises. The cooler and heavier air above the land moves towards the sea to fill up the space. *The cooler air that moves from the land towards the sea during the night is called* ***land breeze***.



Land breeze

Monsoon breeze (monsoon wind)

In places near the equator, during summer the land warms up faster than the sea and ocean due to direct sun rays. Since the temperature of land is more than the sea and ocean, the air above it also gets heated up. We know that warm air rises up, so the warm air above the land rises up. The moisture-laden cold wind from the ocean and sea moves towards the land to take the place of the risen warm air. The moisture-laden air that moves from the sea towards the land during summers is called **monsoon breeze** or **monsoon wind**. These monsoon winds bring rain. In India, we get rainfall during rainy season due to these winds.



(a) Summer (b) Winter

Monsoon breeze

Role of ventilators in closed spaces

Ventilators and exhaust fans are generally located at the top portion of the walls of rooms. This is because the air that we breathe out is warmer and impure as it is rich in carbon dioxide. So, it rises up and goes out through the ventilators. Fresh air from outside then enters the room though windows. Thus, we should keep our windows open and let fresh air and sunlight come in.

Air pollutants, unwanted smells of cooking, and foul smell also escape through ventilators. If you do not have adequate air flow in your home, then moisture will collect and dampen your walls, wooden furniture, and other essential items of your home. Moulds can also grow and cause health hazard. Thus, to keep our homes fresh, dry, and airy we should have ventilators and exhaust fans in our homes.

In the kitchens in our homes and also in factories, chimneys and exhaust fans are used to assist in throwing out smoke and foul air out, so that fresh air can enter from outside and takes it place.

NOTE: Practice the diagrams of – **Sea breeze and Land breeze**. No need to colour, do it only by pencil. Draw all arrows and all pointing as given in the book.

For more information and better understanding click on the links- https://www.youtube.com/watch?v=DzwnlzmW-Z0

https://www.youtube.com/watch?v=pQAG41h3Uz8

WRAP UP

- Anything that has mass and occupies space is called matter. Solid, liquid, and gas are the three states of matter.
- In solids, the particles are tightly packed. Solids have a fixed shape and a definite volume.
- **Crystals** such as those of **sugar** and **copper sulphate** are also examples of solids.
- In liquids, the particles are loosely packed. Liquids do not have a fixed shape. Liquids can flow. Liquids have a fixed volume.
- In gases, the particles are very loosely packed. Gases do not have a fixed shape or volume. They can flow easily and fill up the entire space available to them.
- When two substances are combined together in such a way that they evenly spread and mix with each other, it is called a solution.
- Solute and solvent are the two substances that make a **solution**.
- Substances that dissolve completely in a liquid to form a solution are called **soluble substances**.
- Substances that do not dissolve in a liquid are called **insoluble substances**.
- Soluble and insoluble solutes can be separated from solvents using different methods.
- We can remove soluble substances from a liquid (say water) by methods such as boiling and distillation.
- Insoluble substances, such as mud and sand, can be removed by sedimentation followed by decantation or filtration.
- When two liquids, such as water and milk, are combined together and they completely mix with each other, they are called miscible liquids.
- There are certain liquids that do not completely mix with each other. These liquids are called immiscible liquids.
- Air is a mixture of several gases.
- The cooler air that moves from the sea towards the land during daytime is called **sea breeze**.
- The cooler air that moves from the land towards the sea during the night is called **land breeze**.
- The moisture-laden air that moves from the sea towards the land during summers is called **monsoon breeze** or **monsoon wind**.
- The air we breathe out is warmer and impure as it is rich in carbon dioxide. So, it rises up and goes out through ventilators generally located at the top of a room. Air pollutants, unwanted smells of cooking, and foul smell also escape through ventilators.
- In kitchens and factories, chimneys and exhaust fans are used to assist in throwing out smoke and foul air out of the room so that fresh air can enter from the windows.

HOME WORK

DATE-30/4/2020

1. Write true or false for the following statements:-

a) Oxygen is the most abundant gas present in the air.
b) Air does not have any weight.
c) Air becomes heavy when heated.
d) A very strong powerful wind with rain is called storm.

2. Match the following:-

a) solids	i. Blows during the day
b) Solute	ii) Blows at night
c) Land breeze	iii) Dissolves solute particles
d) Sea breeze	iv) Substance that gets dissolved in a solution
e) Solvent	v) Have fixed shape

3. Answer the following questions:-

a) What is Sea breeze?

b) What do you mean by the process of boiling?

c) Explain the role of ventilators in closed space.

4. Write difference between – a) Solids and liquids

b) Sea breeze and Land breeze

HOME ASSIGNMENT No - 9

Class - V Sub: Mathematics

Chapter - 3 Fractions

29/4/2020 → Home Assignment No - 8 → Solution

Date: 30/4/2020

1) a. $\frac{4}{12} + \frac{5}{12}$

$= \frac{4+5}{12}$

$= \frac{9}{12}$

$= \frac{9 \div 3}{12 \div 3}$

$= \frac{3}{4}$ (Ans)

1) b. $\frac{12}{16} + \frac{7}{8}$

Converting the fractions into like fractions, we get

$\frac{12 \times 1}{16 \times 1} = \frac{12}{16}$; $\frac{7 \times 2}{8 \times 2} = \frac{14}{16}$

Now, $\frac{12}{16} + \frac{14}{16}$

$= \frac{12+14}{16} = \frac{26}{16}$

$16)\,26\,(1\frac{10}{16}$
$\quad\;\; 16$
$\quad\;\; 10$

$= 1\frac{10}{16}$ (Ans)

2) a. $\frac{7}{9} - \frac{2}{3}$

Converting the fractions into like fractions, we get

$\frac{7 \times 1}{9 \times 1} = \frac{7}{9}$; $\frac{2 \times 3}{3 \times 3} = \frac{6}{9}$

Now, $\frac{7}{9} - \frac{6}{9}$

$= \frac{7-6}{9}$

$= \frac{1}{9}$ (Ans)

3) a. $1\frac{5}{6} + 1\frac{2}{3}$

$1\frac{5}{6} = \frac{(6 \times 1)+5}{6} = \frac{11}{6}$

$1\frac{2}{3} = \frac{(3 \times 1)+2}{3} = \frac{5}{3}$

$\therefore \frac{11}{6} + \frac{5}{3}$ → Now, convert into like fractions

$\frac{11 \times 1}{6 \times 1} = \frac{11}{6}$; $\frac{5 \times 2}{3 \times 2} = \frac{10}{6}$

So, $\frac{11}{6} + \frac{10}{6}$

$= \frac{11+10}{6} = \frac{21}{6}$

$6)\,21\,(3\frac{3}{6}$
$\quad\;\; 18$
$\quad\;\; 3$

$= 3\frac{3}{6}$ (Ans)

3) b. $2\frac{2}{3} - 2\frac{1}{6}$

$2\frac{2}{3} = \frac{(3 \times 2)+2}{3} = \frac{8}{3}$

$2\frac{1}{6} = \frac{(6 \times 2)+1}{6} = \frac{13}{6}$

$\therefore \frac{8}{3} + \frac{13}{6}$ → Now, convert into like fractions

$\frac{8 \times 2}{3 \times 2} = \frac{16}{6}$; $\frac{13 \times 1}{6 \times 1} = \frac{13}{6}$

So, $\frac{16}{6} + \frac{13}{6}$

$= \frac{16+3}{6} = \frac{29}{6}$

$6)\,29\,(4\frac{5}{6}$
$\quad\;\; 24$
$\quad\;\; 5$

$= 4\frac{5}{6}$ (Ans)

4) We know, $4 > 3$ so, $\frac{4}{7} > \frac{3}{7}$

$\therefore$ Jenney ate $\left(\frac{4}{7} - \frac{3}{7}\right)$ more than Aman

$= \frac{4-3}{7} = \frac{1}{7}$ " " "

Ans: Jenny ate $\frac{1}{7}$ of the cake more than Aman.

5) $1\frac{1}{2} = \frac{(2\times1)+1}{2} = \frac{3}{2}$

Raghav had $\frac{3}{2}$ litre of milk and he drank $\frac{3}{8}$ milk of it.

$\therefore$ He did not drink $= \left(\frac{3}{2} - \frac{3}{8}\right)$ litre milk.

$\frac{3}{2} - \frac{3}{8}$

$\frac{3\times4}{2\times4} = \frac{12}{8}$; $\frac{3\times1}{8\times1} = \frac{3}{8}$

$= \frac{12}{8} - \frac{3}{8}$ litre milk

$= \frac{12-3}{8}$ " "

$= \frac{9}{8}$ " "

$8)\overline{9}(1\frac{1}{8}$
$\underline{8}$
1

$= 1\frac{1}{8}$ litre milk

Ans: He did not drink $1\frac{1}{8}$ litre milk.

6) Kylie read $\frac{1}{5}$ of a story book on one day and $\frac{1}{4}$ of the same book on next day.

$\therefore$ In two days total she read $= \left(\frac{1}{5} + \frac{1}{4}\right)$ of the story book

$\frac{1\times4}{5\times4} = \frac{4}{20}$

$\frac{1\times5}{4\times5} = \frac{5}{20}$

$= \left(\frac{4}{20} + \frac{5}{20}\right)$ " " " "

$= \frac{4+5}{20}$

$= \frac{9}{20}$ of the story book.

Ans: $\frac{9}{20}$ of the book was read.

HOME ASSIGNMENT No-9

Class V Sub: Maths

Chapter: 3 - Fractions

Date: 30/4/2020

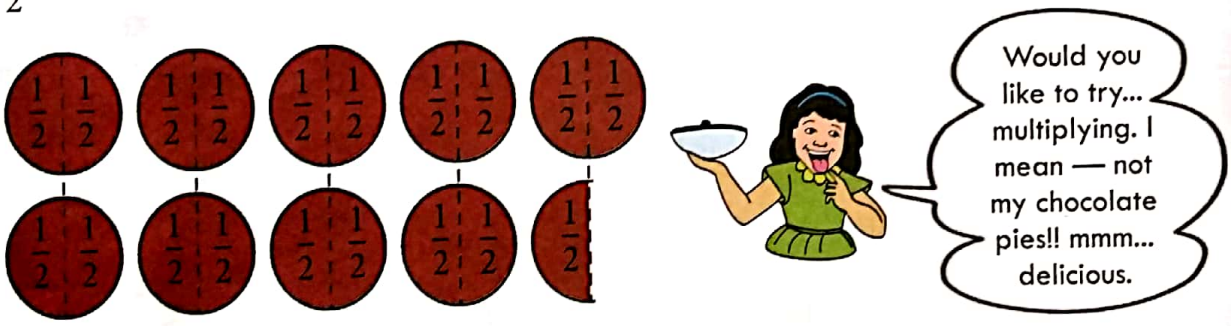
Multiplication and Division of Fractions

Multiplication of Fractions

Facts to be remembered when multiplying fractions.

1. Change the whole numbers and mixed numbers into improper fractions. $8 \times 2\frac{1}{3} = \frac{8}{1} \times \frac{7}{3}$
2. Multiply: $\frac{\text{Numerator} \times \text{Numerator}}{\text{Denominator} \times \text{Denominator}}$ $\frac{8 \times 7}{1 \times 3} = \frac{56}{3}$
3. Reduce the fraction to its lowest terms.
4. Convert your answer to a mixed number, if it is an improper fraction. $\frac{56}{3} = 18\frac{2}{3}$

Pinky had invited her friends for tea. Her father had baked chocolate pies. If each child ate $\frac{1}{2}$ of a pie and there were 19 children, how many chocolate pies did they eat altogether?



Examples:

Multiplying a Whole number with a Fraction	Multiplying a Fraction with a Fraction	Multiplying a Mixed Number with a Fraction	Finding the Fraction of a Number
a. $20 \times \frac{1}{5} = \frac{20}{1} \times \frac{1}{5}$ $= \frac{20 \times 1}{1 \times 5} = \frac{20}{5} = 4$ b. $8 \times \frac{1}{3} = \frac{8}{1} \times \frac{1}{3} =$ $\frac{8 \times 1}{1 \times 3} = \frac{8}{3} = 2\frac{2}{3}$	a. $\frac{2}{3} \times \frac{4}{5} = \frac{2 \times 4}{3 \times 5}$ $= \frac{8}{15}$	a. $2\frac{1}{2} \times \frac{1}{3}$ $= \frac{5}{2} \times \frac{1}{3}$ $= \frac{5 \times 1}{2 \times 3} = \frac{5}{6}$	a. $\frac{2}{5}$ of 20 ('of' means multiply) $= \frac{2}{5} \times \frac{20}{1}$ $= \frac{2 \times 20}{5 \times 1} = \frac{40}{5} = 8$

Multiplication of fractions by simplification :-

Multiply : $\frac{3}{12} \times \frac{4}{9}$

Here we cancel out by dividing the denominator of one fraction with the numerator of the another.

For example, denominator of the first fraction = 12

Numerator of the second fraction = 4

12 is 3 times 4.

So, we cancel out 4 and 12 by reducing them to their lowest term. Similarly, we cancel out 3 and 9.

$$\frac{\cancel{3}^{1}}{\cancel{12}_{3}} \times \frac{\cancel{4}^{1}}{\cancel{9}_{3}} = \frac{1}{3} \times \frac{1}{3} = \frac{1 \times 1}{3 \times 3} = \frac{1}{9}$$

So, $\frac{3}{12} \times \frac{4}{9} = \frac{1}{9}$ (Ans)

Multiplication of more than two fractions :-

Example: $2\frac{1}{10} \times 1\frac{3}{7} \times \frac{5}{39} \times 10\frac{2}{5}$

Step 1 ⇒ Convert mixed numbers into improper fractions -

$$\frac{21}{10} \times \frac{10}{7} \times \frac{5}{39} \times \frac{52}{5}$$

Step 2 ⇒ Simplify any numerator with any denominator.

$$\frac{\cancel{21}^{3}}{\cancel{10}_{1}} \times \frac{\cancel{10}^{1}}{\cancel{7}_{1}} \times \frac{\cancel{5}^{1}}{\cancel{39}_{3}} \times \frac{\cancel{52}^{4}}{\cancel{5}_{1}} = \frac{3 \times 1 \times 1 \times 4}{1 \times 1 \times 3 \times 1}$$

Step 3 ⇒ Multiply numerators and denominators.

$$\frac{3 \times 1 \times 1 \times 4}{1 \times 1 \times 3 \times 1} = \frac{\cancel{12}^{4}}{\cancel{3}_{1}} = \frac{4}{1} \text{ or } 4$$

Hence, $2\frac{1}{10} \times 1\frac{3}{7} \times \frac{5}{39} \times 10\frac{2}{5} = 4$ (Ans)

Note : 'of' means multiply. Example: $\frac{2}{5}$ of 10

$$= \frac{2}{\cancel{5}} \times \frac{\cancel{10}^{2}}{1} = \frac{2 \times 2}{1} = \frac{4}{1} \text{ or } 4 \text{ (Ans)}$$

Word Problems

Example 1: A family spent $\frac{1}{6}$ of their weekly income of ₹6660 on transport. Find the weekly expenditure on transport.

Solution : Transport expenditure = $\frac{1}{6}$ of ₹6660 = $\frac{1}{\cancel{6}} \times \overset{1110}{\cancel{6660}}$ = ₹1110

Thus, ₹1110 is their weekly expenditure on transport.

Example 2: At a picnic, $\frac{1}{5}$ of the students ate upma and $\frac{1}{4}$ of the students ate dosa. How many students did not eat either upma or dosa, if there were 40 students?

Solution : Students who ate upma: $\frac{1}{5} \times 40 = 8$

Students who ate dosa: $\frac{1}{4} \times 40 = 10$

Students who ate upma and dosa = 8 + 10 = 18

Number of students who did not eat either upma or dosa = 40 – 18 = 22

Multiplication Facts	
1. Changing the order of fractional numbers does not change the product.	$\frac{1}{2} \times \frac{4}{7} \times \frac{7}{9} = \frac{2}{9}$ or $\frac{4}{7} \times \frac{7}{9} \times \frac{1}{2} = \frac{2}{9}$
2. The product of a fraction and 1 is the fraction itself.	$\frac{5}{6} \times 1 = \frac{5}{6}$
3. The product of a fraction and 0 is 0.	$\frac{5}{6} \times 0 = 0$

Homework

Date: 30/4/2020

1) Multiply the whole numbers by fractions -

a. $8 \times \frac{1}{3}$ b. $14 \times \frac{2}{7}$

2) Multiply the fraction by a fraction -

a. $\frac{1}{8} \times \frac{1}{8}$ b. $\frac{3}{11} \times \frac{33}{35}$

3) Multiply the mixed number by a fraction -

a. $3\frac{2}{3} \times \frac{1}{22}$

4) Find the fraction -

a. $\frac{2}{3}$ of 18

5) Find the product of the following -

a. $7\frac{3}{5} \times \frac{7}{25} \times 2\frac{2}{19}$

CLASS –V

SUBJECT : ENGLISH LANGUAGE

STUDY MATERIAL NO 10

CHAPTER PRONOUNS

30/4/2020

Answer Key

1. Look at **this** newspaper here.
2. **These** are my grandparents, and **those** people over there are my friend's grandparents.
3. **That** building over there is the Chrysler Building.
4. **This** is my mobile phone and **that** is your mobile phone on the shelf over there.
5. **These** photos here are much better than **those** photos on the book.
6. **That** was a great evening.
7. Are **these** your pencils here?
8. **That** bottle over there is empty.
9. **Those** bricks over there are for your chimney.
10. John, take **this** folder and put it on the desk over there.

1. **These** boys are in my class.
2. **These** apples are very sweet.
3. I like **this** color.
4. Where shall we hang **those** pictures?
5. Can you help me carry **these** boxes?
6. Are **these** mangoes ripe?
7. **These** birds sing beautifully.
8. **Those** were the best days of my life.
9. **That** was an interesting story.
10. Can you help me tie **this** knot?

CLASS-V

SUBJECT : ENGLISH LANGUAGE

CHAPTER- PRONOUNS

STUDY MATERIAL NO 11

30/4/2020

Interrogative Pronouns

What Is an Interrogative Pronoun?

An interrogative pronoun is a **pronoun** which is used to make asking questions easy. There are just five interrogative pronouns. Each one is used to ask a very specific question or indirect question. Some, such as “who” and “whom,” refer only to people. Others can be used to refer to objects or people. Once you are familiar with interrogative pronouns, you’ll find that it’s very easy to use them in a variety of situations.

Interrogative pronouns can also be used as relative pronouns, which *may* be found in questions or indirect questions. You’ll know for certain that a pronoun is classified as an interrogative when it’s used in an inquiring way, because interrogative pronouns are found *only* in question and indirect questions.

The five interrogative pronouns are what, which, who, whom, and whose.

- What – Used to ask questions about people or objects. Examples:
  - What do you want for dinner?
  - I wonder what we’re doing tomorrow.
  - What is your friend’s name?
  - What time are we supposed to be there?
- Which – Used to ask questions about people or objects. Examples:
  - Which color do you prefer?
  - Which of these ladies is your mother?
  - She asked which train to take.
  - Which seat would you like?
- Who – Used to ask questions about people. Examples:
  - Who is that?
  - Who was driving the car?
  - I’m wondering who will be at the party.
  - Who is going to take out the trash?

- Whom – This interrogative pronoun is rarely seen these days, but when it shows up, it is used to ask questions about people. Examples:
    - Whom did you speak to?
    - Whom do you prefer to vote for?
    - You should ask whom to call.
    - Whom do you live with?
- Whose – Used to ask questions about people or objects, always related to possession. Examples:
    - Whose sweater is this?
    - Whose parents are those?
    - I wonder whose dog knocked our garbage can over.
    - Whose phone is that?

In some cases, interrogative pronouns take on the suffix *–ever*. A few can also take on the old-fashioned suffix *–soever*, which is rarely seen in writing these days. For example:

- Whatever
- Whatsoever
- Whichever
- Whoever
- Whosoever
- Whomever
- Whomsoever
- Whosever

Interrogative pronouns are very easy to remember and use. Memorize them to make things even simpler.

Examples of Interrogative Pronouns

Sentences containing interrogative pronouns are always questions, so they always end with a question mark. In the following examples, interrogative pronouns have been italicized for ease of identification.

1. *What* do you want for your birthday?
2. *Which* shirt do you think looks better on me?
3. *Who* do you think will win the playoff game?
4. To *whom* are you speaking?
5. *Whose* socks are those?

Fill in the blanks with suitable interrogative pronouns

1. ——————- did you invite to preside over the meeting?

a) Who
b) Whom
c) What
d) Whose

2. She asked ——————- I preferred, tea or coffee?

a) Who
b) That
c) Which
d) Whom

3. Of ——————- are you speaking?

a) Who
b) Whom
c) Whose
d) None of these

4. ——————- do you want to do?

a) What
b) Which
c) That
d) Whom

5. ——————- shall I give this to?

a) Whom
b) What
c) Whose
d) Which

6. ——————- of these books will you take?

a) Which
b) Whom
c) That
d) Whose

7. I don’t know ——————— of them will actually get it?

a) Whom
b) What
c) Which
d) Whose

8. ——————————- said these words?

a) Who
b) Whom
c) What
d) Which

9. Of ——————————— boy are you speaking?

a) Whom
b) Who
c) Which
d) That

10. ——————————— do you want to see?

a) Who
b) Whom
c) Which
d) Whose

11. ——————————— did he come here for?

a) Why
b) What
c) Whom
d) Who

12. ——————————-, do you think, is the correct answer to this question?

a) What
b) Which
c) Who
d) Whom

13. To ——————————- did she give her necklace?

a) Whom
b) Whose
c) What
d) Which

14. ——————— do you think he is?

a) What
b) That which
c) Who
d) Which

15. With ——————— were you exchanging pleasantries?

a) Whom
b) What
c) Which
d) Who

16. ——————— is better, honor or riches?

a) Which
b) Who
c) That
d) Whom

17. ——————— of them wants to see me?

a) Which
b) What
c) That
d) Whom

18. To ———————- do you pass on the notes?

a) Who
b) Whom
c) What
d) Which

HOME ASSIGNMENT

CLASS – V

SUBJECT – ART EDUCATION

DATE - 30.04.2020

<u>Draw step by step and colour this pictures :-</u>

CLASS-5

DATE-30.4.20 COMPUTER

SOLUTION OF 3RD HOME ASSIGNMENT OF CHAPTER-1
(EVOLUTION OF COMPUTERS)

ANSWER SHEET

A. Answer the following questions:

1. What is multimedia computer?

Ans- 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.

2. Write in brief about First Laptop or Portable Computer.

Ans- 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.

B. Fill in the blanks:

1. Programma 101 was the first commercial desktop personal computer.

2. Intel 4004 was a 4-bit central processing unit (CPU) released by Intel corporation in 1971.

CLASS-5

DATE-30.4.20 COMPUTER

CHAPTER-1 (EVOLUTION OF COMPUTERS)

4TH HOME ASSIGNMENT

Types of computers

Computers have evolved immensely to accommodate different needs. Computers can be as a building or as small as a laptop or a microcontroller in mobile. Depending on the size and type, computers can be classified as:

1. Supercomputers
2. Mainframe computers
3. Minicomputers
4. Microcomputers

Supercomputers

Supercomputers are biggest and the most powerful computers today. They can process trillions of instructions per second. They are specialized & task-specific computers used by large organizations. They are used for research & exploration purposes. For example, NASA uses supercomputers for launching & controlling space shuttles, and space exploration.

Supercomputers are expensive and large in size. They can be accommodated in large air-conditioned rooms.

Cray-1, Belle, Deep Blue & Hydra are examples of supercomputers.

Mainframe computer

Mainframe computers are not as powerful as supercomputers. Mainframe computers can process and store large amount of data. They are used by many large firms and government organizations to run their business operations.

The popular mainframe computers are Fujitsu's ICL VME & Hitachi's Z800.

Minicomputer

Minicomputers are also called mid- range computers. They are small machines & can be accommodated on a disk with limited processing & data-storage capabilities.

These computers are not designed for a single user. Individual departments of a company or organization use minicomputers for specific purposes.

For example, the production department can use minicomputers for monitoring certain production processes. A few popular minicomputers are K-202, Texas Instrument TI-990, SDS-92 & IBM mid-range computers.

Microcomputer

Desktop computers, laptops, personal digital assistants (PDAs), tablets & smartphones are the different types of microcomputers. Microcomputers are widely used & are the fastest-growing computers.

Microcomputers are small computers that use a microprocessor. Microprocessor is CPU on a single chip. They can handle a variety of applications.

A. Answer the following questions:

    1. Differentiate between mainframe computers & supercomputers.

    2. State the different types of computers. Give two examples of each.