

Dhareshwar Vidya Va Krida Pratisthan's
Dhareshwar Shikshansastra Mahavidyalaya

Second Year

B.ED 207 : Activity 1 : BLOCK TEACHING

Name of the Student: Mr./Mrs. Kolhe Mohini Sunil Roll No.: 02

EVALUATION SCHEME

Rating Scale 1) Unsatisfactory 2) Average 3) Satisfactory 4) Good 5) Excellent

No	Steps	Criteria	1	2	3	4	5
1	Lesson Note	Neat, Correct and complete			✓		
2	Introduction	Relevant and stimulating				✓	
3		Revival of previous knowledge and linking with the topic				✓	
4		Statement of Aim and Title writing				✓	
5	Presentation	Clarity and Fluency in / Narration/ Illustration				✓	
6		Questions- Clear, Concise and grammatically correct				✓	
7		Question – Logical and thought Provoking.			✓		
8		Distribution of questions and Reinforcement				✓	
9		Black Board work				✓	
10		Clarity and Reading/Ease in Demonstration				✓	
11		Explanation: Use of Examples.				✓	
12		Mastery over the content.				✓	
13		Use of Teaching Aids/ Use of ICT component.			✓		
14		Student participation.			✓		
15		Teacher's Preparedness.				✓	
16		Classroom management and Time management				✓	
17	Formative Evaluation	Recapitulation as per objectives.				✓	
18		Application – Use of evaluation Tools : MCQ, Matching item, GD, Project, Quiz Puzzle etc.			✓		
19		Homework – Appropriate/ Activity based.				✓	
20		Overall Impression (Effectiveness of Teaching)				✓	
TOTAL MARK - 100							
							75

Qualitative Feedback, (if any) :

 A असाधारण पाठ्यक्रमाचे अंशदानेने
 A असाधारण अंशदानेने

Signature of Professor In-charge

धारेश्वर शिक्षणशास्त्र महाविद्यालय, धायरी पुणे.

सलग पाठाचे टाचण / BLOCK TEACHING LESSON

B.Ed. / प्रथमवर्ष / द्वितीय वर्ष

पाठ क्र. Lesson No. |

दिनांक Date 2/11/23

विद्यार्थ्यांचे नाव

Kolhe Mohini Sunil

इयत्ता Std

8th

तुकडी Div.

A

Name of the Student

शाळेचे नाव

School Name

Venkateshwara School

विषय

Subject

Science

घटक
Unit

Chemical Change
& Chemical Bond

उपघटक
Subunit

Natural Chemical
Changes

पूर्वज्ञान

Previous Knowledge

Students know about natural changes.

पाठाचा हेतू Aim of the Lesson

Students should learn about natural chemical changes.

अध्यापन पद्धती Teaching Method

Block Teaching

शै. साधने Teaching Aids

Chart, Board, Chalk, Projector.

अध्यापन मुद्दे: Teaching Points

Respiration, Photosynthesis.

गाभाभूत घटक : Core Elements

Identifying reactants, products & understanding energy changes

मूल्ये / Value

Scientific Attitude.

उद्दिष्टे Objectives

स्पष्टिकरणे Specification

Knowledge :-

1. Students tells about natural chemical changes
2. Students tells significance of natural chemical changes

Understanding :-

1. Student recognize the sign of chemical change
2. Student distinguish between natural chemical change and physical change

Application :-

Student discuss about the environmental impact of natural chemical changes.

Teacher ask some questions to students

1. Can you provide examples of chemical changes that you observe in daily life?
2. Why is it important to understand chemical changes in our surroundings?
3. How do chemical changes impact the properties of substances?

Statement of Aim
Today we are going to study about the natural chemical changes.

Presentation

13. Chemical Change and Chemical Bond.

Teacher writes the name

a. Natural Chemical Changes :-

a. Respiration :-

Respiration is a continuously occurring biological process. In this process, we inhale the air and exhale carbon dioxide and water vapours. After an in depth study it is learnt that glucose in the cells react with oxygen in the inhaled air to form

Teacher explain the respiration process.

Teacher explain the process

Student gives examples

No reply from students

Student answers the question

of the lesson on board

Students observe carefully

tion occurring in biological

Students listen carefully

of respiration

Students listen carefully

आशय / Content	शिक्षक कृती / Teacher Activity
<p>carbon dioxide and water</p> <p>The word equation and the chemical equation of this chemical equation of this chemical reaction.</p>	
<p>Word eq:-</p> $\text{Glucose} + \text{Oxygen} \xrightarrow{\text{respiration}} \text{Carbon dioxide} + \text{Water}$	Teachers explain the word equation
<p>Chemical eq:-</p> $\text{C}_6\text{H}_{12}\text{O}_6 + \text{O}_2 \xrightarrow{\text{respiration}} \text{CO}_2 + \text{H}_2\text{O}$	Teachers explain the chemical equation.
<p>b. Photosynthesis :-</p> <p>You know that green plants perform photosynthesis in sunlight. A word equation and a chemical equation can be written for this natural chemical change as follows</p>	Teachers explain the process of photosynthesis
<p>Word equation:-</p> $\text{Carbon dioxide} + \text{Water} \xrightarrow[\text{green plant}]{\text{Sunlight}} \text{Glucose} + \text{Oxygen}$	Teachers explain the word equation
<p>Chemical Equation:-</p> $\text{C}_6\text{H}_{12}\text{O}_6 + \text{O}_2 \xrightarrow{\text{resp.}} \text{CO}_2 + \text{H}_2\text{O}$	Teachers explain the chemical equation
$\text{CO}_2 + \text{H}_2\text{O} \xrightarrow[\text{green plant}]{\text{Sunlight}} \text{C}_6\text{H}_{12}\text{O}_6 + \text{O}_2$	
	Today we have learnt natural chemical changes. We will study manmade chemical changes in next lecture.

विद्यार्थी कृती / Student Activity	
	संकलन / (Recapitulation)
	1. What are the natural chemical changes?
	2. Give examples of natural chemical changes?
Students observe carefully	
Students observe carefully	
	उपयोजन / (Application)
Students listen carefully	1. What is the process of photosynthesis?
	2. What is the formula for glucose?
Students observe carefully	
Students observe carefully	
	स्वाध्याय / (Home Assignment)
	1. Write the process of respiration?

इयत्ता / Class: 8th

विषय Sub.: Science

दिनांक Date 2/11/23

तुकडी / Div: A

घटक Unit: Chemical Change & chemical bo

उपघटक Subunit: Natural chemical changes

13. Chemical Change and Chemical Bond

* Natural Chemical Changes :-

• Respiration :-



• Photosynthesis :-



INTERNSHIP PROGRAMME EVALUATION SCHEME

Rating Scale 1) unsatisfactory 2) Average 3) Satisfactory 4) Good 5) Excellent

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6		Questions - Clear, Concise and grammatically correct					
7		Logical and thought provoking questions					
8		Distribution of questions and Reinforcement					
9		Black Board Work					
10		Clarity and Reading / Demonstration					
11		Classroom interaction					
12		Use of Teaching Aids / Use of Examples					
13		Mastery over the content					
14		Classroom Management					
15		Time Management					
16	Recapitulation	Student's response					
17	Application	Appropriate / Creative application					
18		Appropriate / Activity based Home work					
19	Home Work	Inclusion of core elements values and Life Skills					
20		Overall impression					
Total Marks - 100							

Qualitative Feedback, (if any) :

Aspect	Natural Chemical Changes	Man-Made Chemical Changes
Source	Processes occurring in nature	Induced by human activity
Occurrence	Happen without human intervention	Purposefully initiated by humans
Examples	Digestion, photosynthesis, decay	Combustion, polymerization, synthesis of pharmaceuticals
Time Scale	Can occur over long periods of time	Can occur rapidly or over specified timeframes
Control	Typically uncontrollable	Can be controlled and manipulated
Environmental Impact	May have minimal human impact, may contribute to ecological balance	Can lead to pollution, waste, and environmental degradation if not managed properly
Regulation	Governed by natural laws	Subject to regulation and oversight by authorities
Intentionality	No human intent involved	Human intent and design involved

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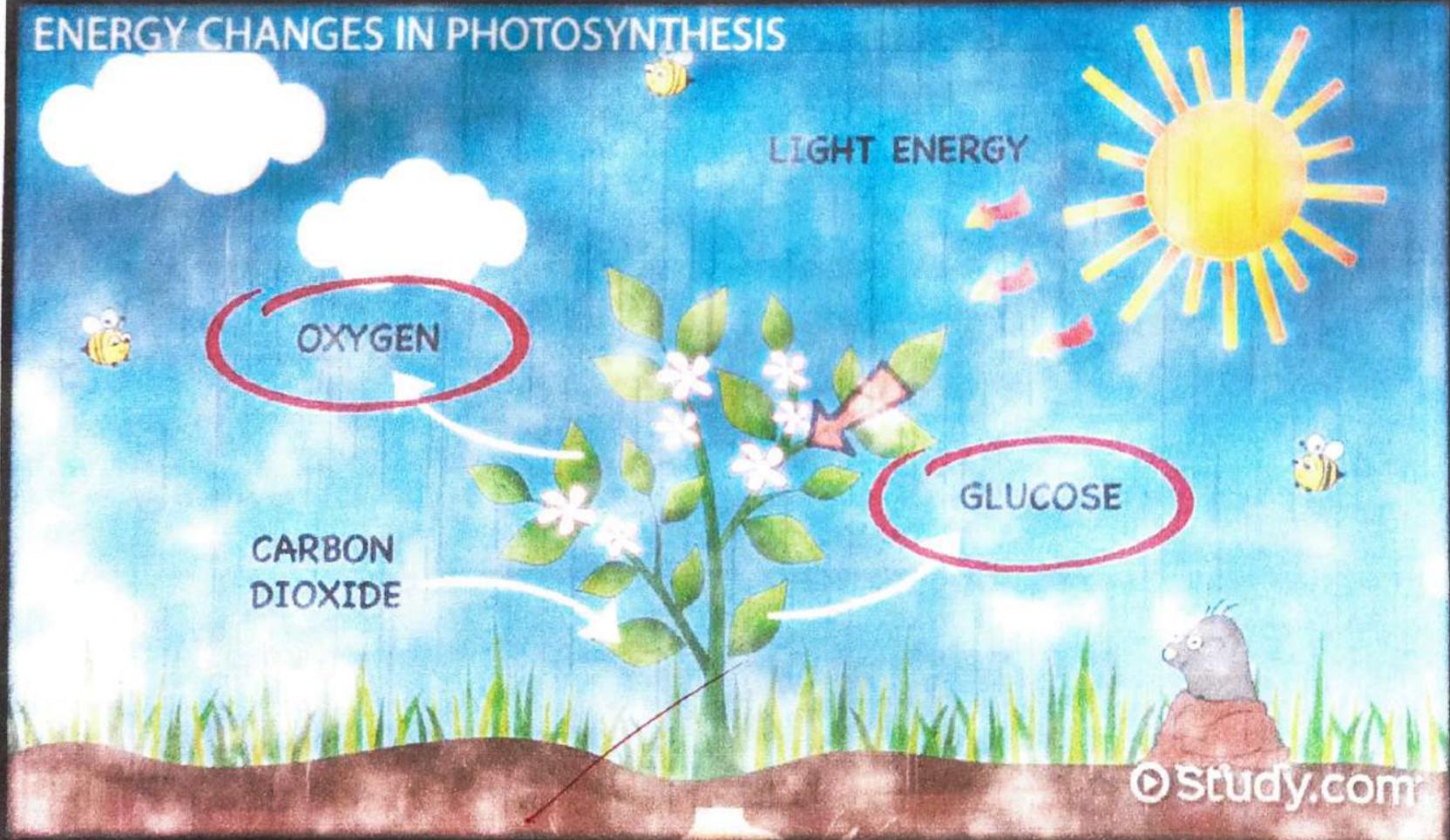
natural changes

- natural changes that can affect the ecosystem.
- wind rain predation and so are the examples of natural changes
- human also change ecosystem by reduving habitat.



Natural
Changes

ENERGY CHANGES IN PHOTOSYNTHESIS



Dhareshwar Vidya Va Krida Pratisthan's
Dhareshwar Shikshansastra Mahavidyalaya

Second Year

B.ED 207 : Activity 1 : BLOCK TEACHING

Name of the Student: Mr./Mrs. Kolhe Mohini Sunil Roll No.: 02

EVALUATION SCHEME

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8		Distribution of questions and Reinforcement				✓	
9		Black Board work				✓	
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11		Explanation: Use of Examples.				✓	
12		Mastery over the content.				✓	
13		Use of Teaching Aids/ Use of ICT component.				✓	
14		Student participation.			✓		
15		Teacher's Preparedness.				✓	
16		Classroom management and Time management				✓	
17	Formative Evaluation	Recapitulation as per objectives.				✓	
18		Application – Use of evaluation Tools : MCQ, Matching item, GD, Project, Quiz Puzzle etc.				✓	
19		Homework – Appropriate/ Activity based.				✓	
20		Overall Impression (Effectiveness of Teaching)				✓	
TOTAL MARK - 100					76		

Qualitative Feedback, (if any) :

★ एरंडासत अणुअतत अततत.
★ अततत अतत अणुअतत अततत.

Signature of Professor In-charge

धारेश्वर शिक्षणशास्त्र महाविद्यालय, धायरी पुणे.

सलग पाठाचे टाचण / BLOCK TEACHING LESSON

B.Ed. / प्रथमवर्ष / द्वितीय वर्ष

पाठ क्र. Lesson No. 2

दिनांक Date 5/12/23

विद्यार्थ्याचे नाव
Name of the Student Kolhe Mohini Sunil

इयत्ता Std 8th

तुकडी Div. A

शाळेचे नाव
School Name Venkateshwara School

विषय
Subject Science

घटक
Unit Chemical Change
& Chemical Bond

उपघटक
Subunit Manmade
Chemical Changes

पूर्वज्ञान
Previous Knowledge Students know about natural chemical changes.

पाठाचा हेतू Aim of the Lesson Students should learn about manmade chemical changes

अध्यापन पद्धती Teaching Method Block Teaching

शै. साधने Teaching Aids Chart, Board, Chalk, Projector

अध्यापन मुद्दे: Teaching Points Combustion of fuels, Cleaning Shahabad tile with dilute HCl

गाभाभूत घटक : Core Elements Reaction types, stoichiometry

मूल्ये / Value Scientific Attitude

उद्दिष्टे Objectives	स्पष्टिकरणे Specification
Knowledge :-	1. Student tells about manmade chemical changes. 2. Student tells significance of manmade chemical changes.
Understanding :-	1. Student gives example of manmade chemical changes 2. Student distinguish between natural chemical change and manmade chemical change.
Application :-	Student discuss about the environmental impact of manmade chemical changes.

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आशय / Content	शिक्षक कृती / Teacher Activity
	Teacher ask some questions to
	1. What are some examples of that you encounter in your
	2. How do humans contribute environment through various
	3. What are some common indu- involve man-made chemical
	Statement of Aim :- Today we are going to study about man-made chemical changes
18. Chemical change and Chemical Bond.	Presentation :- Teacher writes the name of
• Manmade Chemical Changes :- The chemical change that we saw in the first activity. It means that it is an useful manmade chemical change.	Teacher explain manmade
a. Combustion of Fuels :- Wood, coal, petrol or cooking gas are burnt for getting energy. The common substance that burns in all these fuels is 'Carbon'. During the combustion process carbon combine with oxygen in air and the product carbon dioxide is formed. A common equation can be written for all these combustion process as follows	Teacher explain combustion of Teacher explain the process of

विद्यार्थी कृती / Student Activity
Students.
man-made chemical changes daily life? to chemical changes in the activities? stries or processes that changes
Student answer cooking food, burning fuels for energy. No reply from students Student reply pharmaceuticals, food processing and manufacturing.
the lesson on board chemical changes.
Fuels combustion of fuels.
Students observe carefully Students listen carefully Students listen carefully Students listen carefully.

आशय/Content	शिक्षक कृती/Teacher Activity
Word equation :- Carbon + Oxygen \rightarrow Carbon dioxide	Teacher explain the word equation
Chemical Equation :- $C + O_2 \rightarrow CO_2$	Teacher explain the chemical equation.
b. Cleaning Shahabad tile with dilute hydrochloric acid :- The chemical composition of Shahabad tile is mainly calcium carbonate. During its cleaning with hydrochloric acid the upper layer of the tile reacts with hydrochloric acid and three products are formed. One of them is calcium chloride which being soluble in water, gets washed away with water. The second product is carbon dioxide; its bubbles mix up in air. The third product, water mixes with water.	Teacher explain cleaning Shahabad tile with dilute hydrochloric acid.
Word equation :- Calcium Carbonate + Hydrochloric acid \rightarrow Calcium Chloride + Carbon dioxide + water.	Teacher explain word equation.
	Today we have learnt man made changes. We will study chemical bond in next lecture.

विद्यार्थी कृती/Student Activity	
Students observe carefully	संकलन/(Recapitulation)
Students observe carefully	
Students listen carefully	1. What are the manmade chemical changes?
	2. Give example of manmade chemical changes?
Students listen carefully.	
	उपयोजन/(Application)
	1. What is the process of combustion of fuels?
	2. How carbon dioxide is formed?
Students listen and observe carefully.	
Students listen carefully.	
	स्वाध्याय/(Home Assignment)
	1. Write the process of cleaning Shahabad tile with dilute hydrochloric acid.

u3

दिनांक Date 5/12/23

इयत्ता / Class: 8th

विषय Sub.: Science

तुकडी / Div: A

घटक Unit: Chemical change & chemical bond

उपघटक Subunit: Manmade Chemical Change

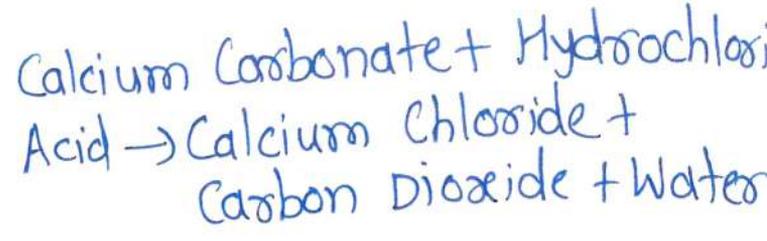
13. Chemical Change and Chemical Bond

* Manmade Chemical Changes :-

• Combustion of Fuels :-



• Cleaning Shahabad tile with dilute HCl :-



INTERNSHIP PROGRAMME EVALUATION SCHEME

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16	Recapitulation	Student's response					
17	Application	Appropriate / Creative application					
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19	Home Work	Inclusion of core elements values and Life Skills					
20		Overall impression					
Total Marks - 100							

Qualitative Feedback, (if any) :

Aspect	Natural Chemical Changes	Man-Made Chemical Changes
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Man-made Changes



Dhareshwar Vidya Va Krida Pratisthan's
Dhareshwar Shikshansastra Mahavidyalaya

Second Year

B.ED 207 : Activity 1 : BLOCK TEACHING

Name of the Student: Mr./Mrs. Kolhe Mohini Sunil Roll No.: 02

EVALUATION SCHEME

Rating Scale 1) Unsatisfactory 2) Average 3) Satisfactory 4) Good 5) Excellent

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3		Revival of previous knowledge and linking with the topic				✓	
4		Statement of Aim and Title writing				✓	
5	Presentation	Clarity and Fluency in / Narration/ Illustration				✓	
6		Questions- Clear, Concise and grammatically correct				✓	
7		Question – Logical and thought Provoking.				✓	
8		Distribution of questions and Reinforcement			✓		
9		Black Board work				✓	
10		Clarity and Reading/Ease in Demonstration				✓	
11		Explanation: Use of Examples.				✓	
12		Mastery over the content.				✓	
13		Use of Teaching Aids/ Use of ICT component.				✓	
14		Student participation.				✓	
15		Teacher's Preparedness.				✓	
16		Classroom management and Time management				✓	
17	Formative Evaluation	Recapitulation as per objectives.				✓	
18		Application – Use of evaluation Tools : MCQ, Matching item, GD, Project, Quiz Puzzle etc.				✓	
19		Homework – Appropriate/ Activity based.				✓	
20		Overall Impression (Effectiveness of Teaching)				✓	
TOTAL MARK - 100					78		

Qualitative Feedback, (if any) :

★ सौ. - प्रश्नोत्तर, गीक करत.
★ GTS - कक्षातील प्रश्न.

Signature of Professor In-charge

धारेश्वर शिक्षणशास्त्र महाविद्यालय, धायरी पुणे.

सलग पाठाचे टाचण / BLOCK TEACHING LESSON

B.Ed. / प्रथमवर्ष / द्वितीय वर्ष

पाठ क्र. Lesson No. 3

दिनांक Date 15/1/24

विद्यार्थ्याचे नाव
Name of the Student Kolhe Mohini Sunil

इयत्ता Std 8th

तुकडी Div. A

शाळेचे नाव
School Name Venkateshwara School

विषय
Subject Science

घटक
Unit Chemical Change
& Chemical Bond

उपघटक
Subunit Chemical Bond

पूर्वज्ञान
Previous Knowledge Students know about chemical bond.

पाठाचा हेतू Aim of the Lesson Students should learn about covalent bond

अध्यापन पद्धती Teaching Method Block Teaching

शै. साधने Teaching Aids Chart, Board, Glt Chalk, Projector

अध्यापन मुद्दे: Teaching Points Chemical bond, covalent bond.

गाभाभूत घटक : Core Elements Principles of electron sharing.

मूल्ये / Value Scientific Attitude.

उद्दिष्टे Objectives

स्पष्टिकरणे Specification

Knowledge :-

1. Student tells the concept of chemical bonding.
2. Student tells difference between ionic and covalent bonds.

Understanding :-

1. Student understands the characteristics of ionic and covalent bond.
2. Student recognizes the formation of ions and molecules.

Application

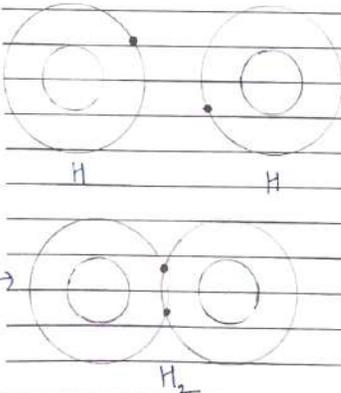
Student correlates the properties of substances with the type of bonding they exhibit.

Skills :-

Student draw Lewis structures

आशय/Content	शिक्षक कृती/Teacher Activity
	Teachers ask some questions
	1. What is a chemical bond?
	2. What are the main types of bonds?
	3. Can you give examples of types of chemical bonds?
	Statement of Aim:- Today we are going to study
13. Chemical change and Chemical Bond.	Presentation:- Teacher writes the name of
• Chemical Bond :- 1. Covalent bond :- Generally a covalent bond is formed when atoms of two elements having similar properties combine. Such atoms cannot exchange electrons. Instead these atoms share electrons with each other. The shared electrons become a common property of both the atoms and thereby the electron octet/duplet of both the atoms becomes complete. We consider an example of hydrogen molecule (H_2). A hydrogen atom contains one electron, its duplet is short of one electron and	Teachers explain the concept
	Teachers explain the example

	विद्यार्थी कृती/Student Activity
to students.	Student reply chemical bond is the force that holds two atoms together in a molecule. Student reply covalent bonds, ionic bonds and metallic bonds. No reply from students.
about covalent bond	Students listen carefully
the lesson on bond.	Students observe carefully
of covalent bond	Students listen carefully
of hydrogen atom	Students listen carefully

आशय / Content	शिक्षक कृती / Teacher Activity
<p>therefore the valency of hydrogen atom is one. The two atoms of hydrogen are identical and have similar tendency and therefore they share their electrons with each other. As a result, the electron duplet of both the hydrogen atoms is completed and a chemical bond is formed between them.</p>	
<p>The chemical bond formed by sharing of valence electrons of two atoms with each other is called a covalent bond.</p>	<p>Teacher explain the definition of covalent bond.</p>
 <p>The diagram illustrates the formation of a covalent bond in a hydrogen molecule (H₂). On the left, two separate hydrogen atoms (H) are shown, each with a single electron in its outer shell. An arrow points to the right, where the two atoms are shown sharing their electrons to form a covalent bond, resulting in an H₂ molecule with a full outer shell for each atom.</p>	<p>Teacher explain the formation of H₂ using diagram</p>
	<p>Today we have learnt covalent bond. We will study ionic bond in next lecture</p>

विद्यार्थी कृती / Student Activity	
	<p>संकलन / (Recapitulation)</p> <ol style="list-style-type: none"> 1. What is mean by covalent bond? 2. When covalent bond is formed?
<p>Students listen carefully</p>	
	<p>उपयोजन / (Application)</p> <ol style="list-style-type: none"> 1. What is the atomic number of hydrogen atom? 2. Why covalent bond formed?
<p>Students observe carefully</p>	
<p>Students listen carefully.</p>	
	<p>स्वाध्याय / (Home Assignment)</p> <p>Write the process of hydrogen atom form a covalent bond.</p>

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इयत्ता / Class: 8th

विषय Sub.: Science

दिनांक Date 15/1/24

घटक Unit:

Chemical change & chemical bond

तुकडी / Div: A

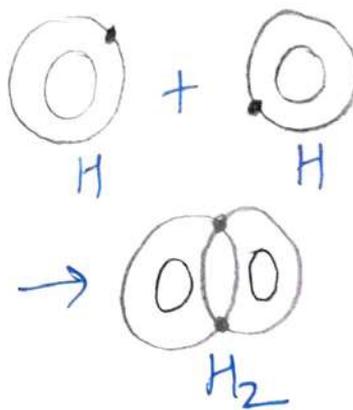
उपघटक Subunit:

Chemical Bond.

13. Chemical Change & Chemical Bond.

* Chemical Bond :-

• Covalent Bond :-



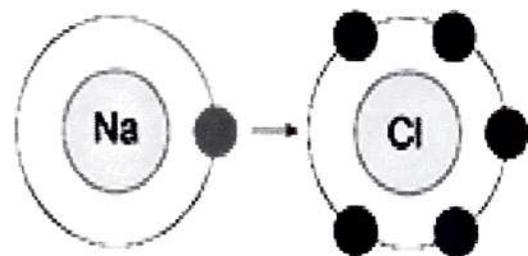
INTERNSHIP PROGRAMME EVALUATION SCHEME

Rating Scale 1) unsatisfactory 2) Average 3) Satisfactory 4) Good 5) Excellent

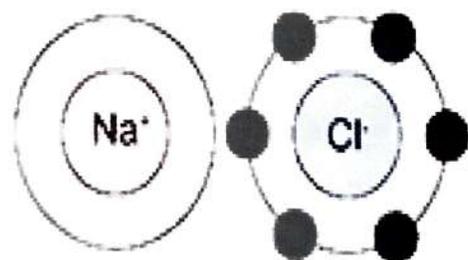
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20		Overall impression					

Ionic Bond	Covalent Bond
1. It is formed by complete transfer of electrons.	1. It is formed by sharing of electrons by both the combining species.
2. It is formed between a metal (electropositive) and a non metal (electronegative).	2. It is formed between two non metals.
3. It has very high boiling point and melting point.	3. It has low m.pt and b.pt .
4. It is polar, as the bond is formed due to electrostatic attraction between two oppositely charged ions.	4. It is less polar or non polar as the electron density is spreaded over the bond due to sharing.
5. Good conductor of electricity.	5. Comparatively bad conductor of electricity.
6. Exists in solid state. Ex: NaCl, K ₂ SO ₄	6. Exists in liquid or gaseous states. Ex: HCl, CH ₃ OH etc.

Ionic bond

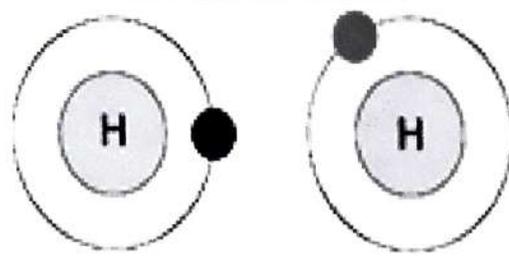


(a) The electron moves from Na to Cl

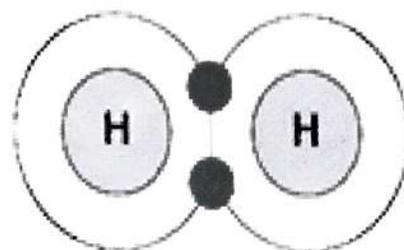


(b) Positively charged Na and negatively charged Cl attract each other and are electronically bonded together

Covalent bond



(c) Electrons cannot move independently



(d) The atoms form bonds by sharing electrons.

धारेश्वर शिक्षणशास्त्र महाविद्यालय, धायरी पुणे.

सलग पाठाचे टाचण / BLOCK TEACHING LESSON

B.Ed. / प्रथमवर्ष / द्वितीय वर्ष

पाठ क्र. Lesson No. 1

दिनांक Date 7/11/23

विद्यार्थ्याचे नाव
Name of the Student Kolhe Mohini Sunil

इयत्ता Std 8th

तुकडी Div. A

शाळेचे नाव
School Name Venkateshwarra School

विषय
Subject Mathematics

घटक
Unit Area

उपघटक
Subunit Area of parallelogram

पूर्वज्ञान

Previous Knowledge

Students know about Area of Triangle.

पाठाचा हेतू Aim of the Lesson

Students should learn about area of parallelogram

अध्यापन पद्धती Teaching Method

Inductive Method

शै. साधने Teaching Aids

Chalk, Chart, Blackboard

अध्यापन मुद्दे: Teaching Points

Area of parallelogram and examples.

गाभाभूत घटक : Core Elements

Area of shapes

मूल्ये / Value

Problem solving ability.

उद्दिष्टे Objectives

स्पष्टिकरणे Specification

Knowledge :-

1. Students understands the formula for finding the area of parallelogram
2. Student knows the properties of parallelogram

Understanding :-

1. Student grasps the concept that the area of a parallelogram.
2. Student understands the relationship between the area of parallelogram & area of rectangle.

Application :-

1. Student apply the area formula to solve problems.
2. Student finds the missing measurements using properties of parallelogram

Student calculates the area of

students

Student reply area of square
 $= \text{side}^2$

Student answers Area of rectangle
 $= \text{length} \times \text{breadth}$

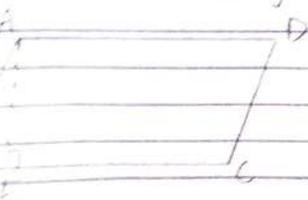
Student answers Area of triangle
 $= \frac{1}{2} \times \text{base} \times \text{height}$

about area of a parallelogram Students observe carefully and listen carefully.

the lesson on board. Students observe carefully.

of draw parallelogram Students listen carefully

on board. Students observe carefully

अभियंता / Content	शिक्षक गति / Teacher Activity
	Teacher ask some questions to
	1. What is the area of square?
	2. What is the area of rectangle?
	3. What is the area of triangle?
	Statement of Ar. 2 - Today we are going to study
Area of a parallelogram:- Draw a big enough parallelogram ABCD. Draw perpendicular AE on side CD. In the right angled $\triangle AEB$, cut it with the remaining part of $\square ABCD$. A rectangle is formed from the parallelogram so area of the figures are equal. Length of the rectangle is one side (length) of the rectangle and height is the other side (breadth) of the rectangle.	Presentation:- Teacher writes the name of the process Teacher describe the process Teacher draw a parallelogram
	

शिक्षक गति / Student Activity	
Students	
Students reply, area of square = side ²	
Student answers Area of rectangle = Length \times breadth	
Student answers Area of triangle = $\frac{1}{2} \times \text{base} \times \text{height}$	
Students observe carefully and listen carefully	about area of a parallelogram
Students observe carefully	the lesson on board.
Students listen carefully	of draw parallelogram
Students observe carefully	on board.

इयत्ता / Class: 8th

विषय Sub.: Mathematics

दिनांक Date 7/11/23

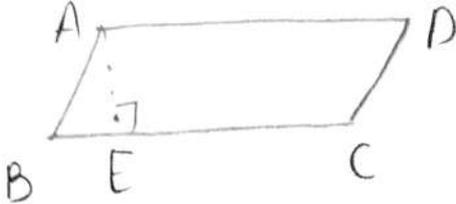
तुकडी / Div: A

घटक Unit: Area

उपघटक Subunit: Area of parallelogram

15. Area

* Area of Parallelogram :-



Area of parallelogram
= base \times height.

INTERNSHIP PROGRAMME EVALUATION SCHEME

Rating Scale 1) unsatisfactory 2) Average 3) Satisfactory 4) Good 5) Excellent

No.	Steps	Criteria	1	2	3	4	5
1	Lesson Note	Neat, Correct and Complete.					
2	Introduction	Relevant and stimulating					
3		Revival of previous knowledge and linking with the topic					
4		Statement of Aim and Title writing					
5	Presentation	Clarity and Fluency in / Narration / Illustration					
6		Questions - Clear, Concise and grammatically correct					
7		Logical and thought provoking questions					
8		Distribution of questions and Reinforcement					
9		Black Board Work					
10		Clarity and Reading / Demonstration					
11		Classroom interaction					
12		Use of Teaching Aids / Use of Examples					
13		Mastery over the content					
14		Classroom Management					
15		Time Management					
16	Recapitulation	Student's response					
17	Application	Appropriate / Creative application					
18		Appropriate / Activity based Home work					
19	Home Work	Inclusion of core elements values and Life Skills					
20		Overall impression					
Total Marks - 100							

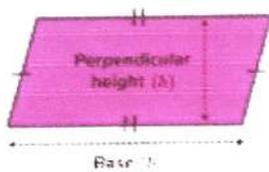
Qualitative Feedback, (if any) :

Area of a Parallelogram

The **area of a parallelogram** is the amount of space inside the parallelogram.

It is **measured in units squared** (cm², m², mm² etc.). It is calculated by multiplying the area found by multiplying its base by its perpendicular height.

Area parallelogram = base × perpendicular height



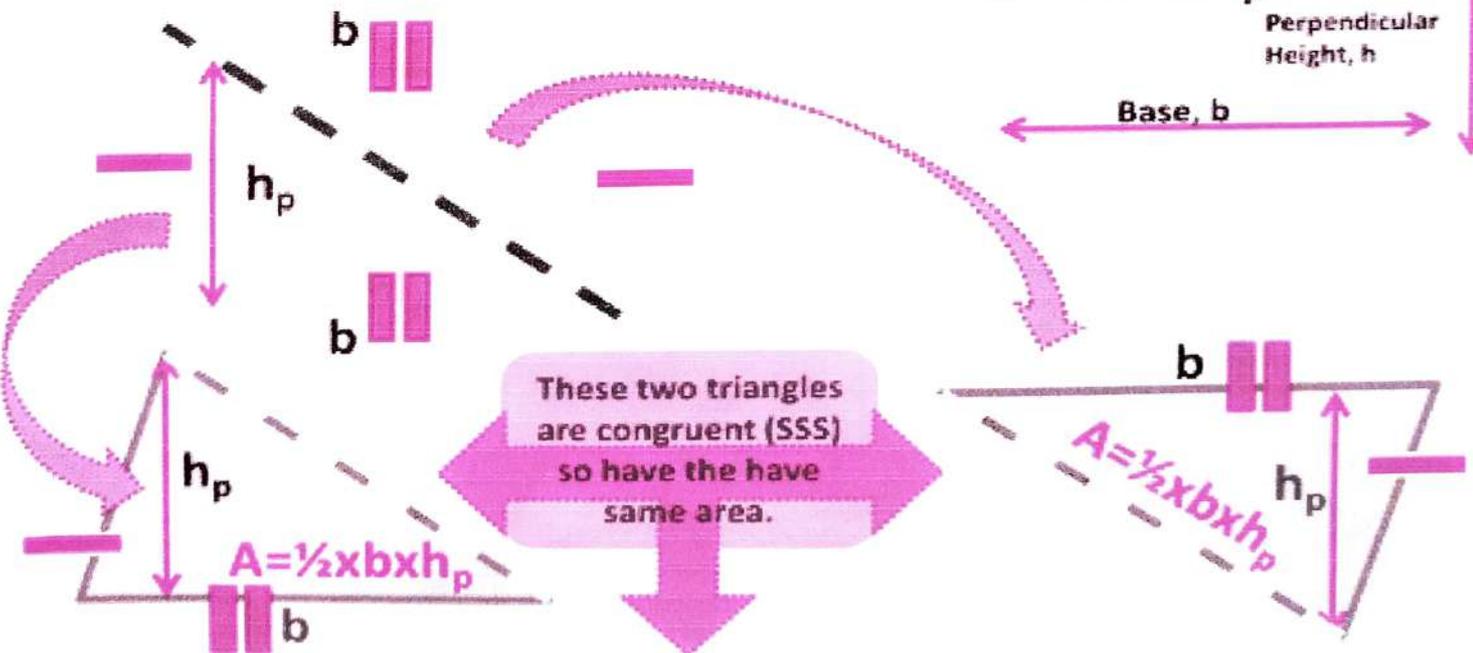
Prove the area of a parallelogram: 'Simplifying proofs'

$A = \text{base} \times \text{perpendicular height}$

$$A = b \times h_p$$

Perpendicular Height, h

Base, b



$$A = 2\left(\frac{1}{2} \times b \times h_p\right)$$

$$A = b \times h_p \quad \square$$

By bringing the two triangles together, we have two lots of the same area.

Dhareshwar Vidya Va Krida Pratisthan's
Dhareshwar Shikshansastra Mahavidyalaya

Second Year

B.ED 207 : Activity 1 : BLOCK TEACHING

Name of the Student: Mr./Mrs. Kolhe Mohini Sunil Roll No.: 02

EVALUATION SCHEME

Rating Scale 1) Unsatisfactory 2) Average 3) Satisfactory 4) Good 5) Excellent

No	Steps	Criteria	1	2	3	4	5
1	Lesson Note	Neat, Correct and complete			✓		
2	Introduction	Relevant and stimulating				✓	
3		Revival of previous knowledge and linking with the topic				✓	
4		Statement of Aim and Title writing				✓	
5	Presentation	Clarity and Fluency in / Narration/ Illustration			✓		
6		Questions- Clear, Concise and grammatically correct			✓		
7		Question – Logical and thought Provoking.			✓	✓	
8		Distribution of questions and Reinforcement				✓	
9		Black Board work				✓	
10		Clarity and Reading/Ease in Demonstration				✓	
11		Explanation: Use of Examples.					✓
12		Mastery over the content.					✓
13		Use of Teaching Aids/ Use of ICT component.					✓
14		Student participation.				✓	
15		Teacher's Preparedness.				✓	
16		Classroom management and Time management				✓	
17	Formative Evaluation	Recapitulation as per objectives.			✓	✓	✓
18		Application – Use of evaluation Tools : MCQ, Matching item, GD, Project, Quiz Puzzle etc.				✓	
19		Homework – Appropriate/ Activity based.				✓	
20		Overall Impression (Effectiveness of Teaching)				✓	
TOTAL MARK - 100			82				

Qualitative Feedback, (if any) :

Signature of Professor In-charge

धारेश्वर शिक्षणशास्त्र महाविद्यालय, धायरी पुणे.

सलग पाठाचे टाचण / BLOCK TEACHING LESSON

B.Ed. / प्रथमवर्ष / द्वितीय वर्ष

पाठ क्र. Lesson No. 2

दिनांक Date 15/12/23

विद्यार्थ्याचे नाव
Name of the Student Kolhe Mohini Sunil

इयत्ता Std 8th

तुकडी Div. A

शाळेचे नाव
School Name Venkateshwara School

विषय
Subject Mathematics

घटक
Unit Area

उपघटक
Subunit Area of rhombus

पूर्वज्ञान

Previous Knowledge

Students know about area of square.

पाठाचा हेतू Aim of the Lesson Students should learn about area of rhombus.

अध्यापन पद्धती Teaching Method Inductive Method.

शे. साधने Teaching Aids Chalk, Chart, Blackboard.

अध्यापन मुद्दे: Teaching Points Area of Rhombus and examples.

गाभाभूत घटक : Core Elements Area of shapes

मूल्ये / Value Problem solving ability.

उद्दिष्टे Objectives	स्पष्टिकरणे Specification
Knowledge :-	1. Student tells properties of a square. 2. Student tells a square based on its properties.
Understanding :-	1. Student tells relationship between the side length and area of square. 2. Student tells concept of symmetry in square.
Application :-	Student construct a square using different methods such as ruler and compass.

Teacher ask some questions to

1. How many points are needed
2. Can a point square be formed
3. What are the characteristics

Statement of Aim:-

Today we are going to study about ~~square~~ area of rhombus

Presentation:-

Teacher writes the name of

15. Area

* Area of a rhombus

We know diagonals of a rhombus are perpendicular bisector of each other.

let $d_1(AC) = d_1$ and $d_2(BD) = d_2$

$\square ABCD$ is a rhombus. Its diagonals intersect in the point P. So we get four congruent right angled triangles. Sides of each right angled triangle are $\frac{1}{2} d_1(AC)$ and $\frac{1}{2} d_2(BD)$

Areas of all these four triangles are equal.

$d(CAP) = d(PC) = \frac{1}{2} d_1(AC) = \frac{d_1}{2}$

and $d(BP) = d(PD) = \frac{1}{2} d_2(BD) = \frac{d_2}{2}$

Area of rhombus ABCD
 $= 4 \times A(CAPB)$
 $= 4 \times \frac{1}{2} \times d(CAP) \times d(BP)$

Teacher describe rhombus

Teacher explain the area

students

to create a point square?
with less than four points?
of a point square?

Student answers 4
Student answers no.
No reply from students.

Students listen carefully.

the lesson on board

Students observe carefully

Students listen carefully.

of rhombus

Students listen carefully

आशय/Content	शिक्षक कृती/Teacher Activity
$= \frac{2 \times d_1 \times d_2}{2 \times 2}$ $= \frac{1}{2} \times d_1 \times d_2$	
<p>Area of a rhombus = $\frac{1}{2}$ × product of lengths of diagonals.</p>	<p>Teacher writes the formula of area of rhombus on board.</p>
<p>Ex(1) Lengths of the diagonals of a rhombus are 11.2 cm and 7.5 cm respectively. Find the area of rhombus.</p> <p>Solution:-</p> <p>Area of rhombus = $\frac{1}{2}$ × product of lengths of the diagonals</p> $= \frac{1}{2} \times 11.2 \times 7.5$ $= 5.6 \times 7.5$ $= 42 \text{ sq cm}$	<p>Teacher write a question on board.</p> <p>Teacher explain the solution of question and write it on blackboard.</p>
	<p>Today we have learnt about area of rhombus. We will study area of trapezium in next lecture.</p>

विद्यार्थी कृती/Student Activity	
	<p>संकलन/(Recapitulation)</p> <p>1. What are the properties of a rhombus?</p> <p>2. Can you explain how the diagonals of a rhombus are related to its angles and sides?</p>
<p>Students observe carefully.</p>	
<p>Students observe carefully.</p>	
<p>Students observe and listen carefully.</p>	<p>उपयोजन/(Application)</p> <p>1. How can you use the properties of a rhombus to find the area of a given rhombus?</p> <p>2. In what real-life scenarios might the properties of a rhombus be useful?</p>
	<p>स्वाध्याय/(Home Assignment)</p> <p>Calculate the area of a rhombus with side lengths of 6 cm and diagonals measuring 8 cm and 10 cm, respectively.</p>

इयत्ता / Class: 8th

विषय Sub.: Mathematics

दिनांक Date 15/12/23

तुकडी / Div: A

घटक Unit: Area

उपघटक Subunit: Area of Rhombus

15. Area

* Area of Rhombus :-

Area of Rhombus

$$= 4 \times A(\Delta APB)$$

$$= 4 \times \frac{1}{2} \times \angle(AP) = \angle(BP)$$

$$= 2 \times \frac{d_1}{2} \times \frac{d_2}{2}$$

$$= \frac{1}{2} \times d_1 \times d_2$$

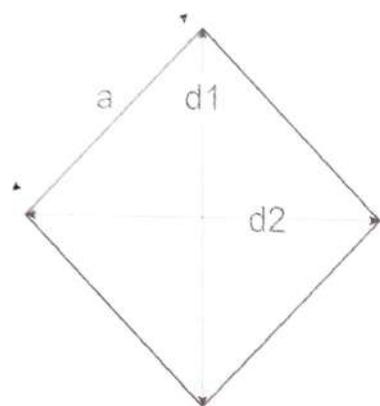
INTERNSHIP PROGRAMME EVALUATION SCHEME

Rating Scale 1) unsatisfactory 2) Average 3) Satisfactory 4) Good 5) Excellent

No.	Steps	Criteria	1	2	3	4	5
1	Lesson Note	Neat, Correct and Complete.					
2	Introduction	Relevant and stimulating					
3		Revival of previous knowledge and linking with the topic					
4		Statement of Aim and Title writing					
5	Presentation	Clarity and Fluency in / Narration / Illustration					
6		Questions - Clear, Concise and grammatically correct					
7		Logical and thought provoking questions					
8		Distribution of questions and Reinforcement					
9		Black Board Work					
10		Clarity and Reading / Demonstration					
11		Classroom interaction					
12		Use of Teaching Aids / Use of Examples					
13		Mastery over the content					
14		Classroom Management					
15		Time Management					
16	Recapitulation	Student's response					
17	Application	Appropriate / Creative application					
18		Appropriate / Activity based Home work					
19	Home Work	Inclusion of core elements values and Life Skills					
20		Overall impression					
Total Marks - 100							

Qualitative Feedback, (if any) :

Area of Rhombus



Rhombus

$$\text{Area of Rhombus} = \frac{(d1 * d2)}{2}$$

$$\text{Diagonal } d2 = \sqrt{4a^2 - d1^2}$$

$$\text{Diagonal } d1 = \sqrt{4a^2 - d2^2}$$



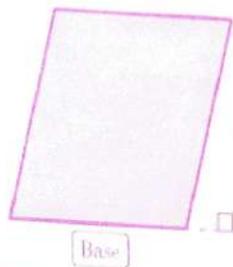
Area of a Rhombus

The **area of a rhombus** is the amount of space inside the rhombus. Like with other 2D shapes, the area is measured in units squared (cm^2 , m^2 , mm^2 etc). A rhombus is a special type of parallelogram that has four sides of equal length.

Here are some strategies to find the area of a rhombus.

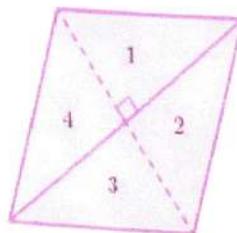
Use the formula:

$$\text{Area} = \text{base} \times \text{height}$$



Use the diagonals:

Find the area of each of the four equal right triangles and add them together.



Dhareshwar Vidya Va Krida Pratisthan's
Dhareshwar Shikshansastra Mahavidyalaya

Second Year

B.ED 207 : Activity 1 : BLOCK TEACHING

Name of the Student: Mr./Mrs. Kolhe Mohini Sunil Roll No.: 02

EVALUATION SCHEME

Rating Scale 1) Unsatisfactory 2) Average 3) Satisfactory 4) Good 5) Excellent

No	Steps	Criteria	1	2	3	4	5
1	Lesson Note	Neat, Correct and complete			✓		
2	Introduction	Relevant and stimulating				✓	
3		Revival of previous knowledge and linking with the topic				✓	
4		Statement of Aim and Title writing				✓	
5	Presentation	Clarity and Fluency in / Narration/ Illustration			✓		
6		Questions- Clear, Concise and grammatically correct					✓
7		Question – Logical and thought Provoking.					✓
8		Distribution of questions and Reinforcement				✓	
9		Black Board work				✓	
10		Clarity and Reading/Ease in Demonstration				✓	
11		Explanation: Use of Examples.				✓	
12		Mastery over the content.				✓	
13		Use of Teaching Aids/ Use of ICT component.				✓	
14		Student participation.				✓	
15		Teacher's Preparedness.				✓	
16		Classroom management and Time management				✓	
17	Formative Evaluation	Recapitulation as per objectives.				✓	
18		Application – Use of evaluation Tools : MCQ, Matching item, GD, Project, Quiz Puzzle etc.				✓	
19		Homework – Appropriate/ Activity based.				✓	
20		Overall Impression (Effectiveness of Teaching)				✓	
TOTAL MARK - 100			82				

Qualitative Feedback, (if any) :


Signature of Professor In-charge

धारेश्वर शिक्षणशास्त्र महाविद्यालय, धायरी पुणे.

सलग पाठाचे टाचण / BLOCK TEACHING LESSON

B.Ed. / प्रथमवर्ष / द्वितीय वर्ष

पाठ क्र. Lesson No. 3

दिनांक Date 5/1/24

विद्यार्थ्याचे नाव Kolhe Mohini Sunil

इयत्ता Std 8th

तुकडी Div. A

Name of the Student

शाळेचे नाव Venkateshwara School

विषय Mathematics

घटक Unit Area

उपघटक Subunit Area of Trapezium

पूर्वज्ञान

Previous Knowledge Students know about area of parallelogram.

पाठाचा हेतू Aim of the Lesson Students should learn about area of trapezium.

अध्यापन पद्धती Teaching Method Inductive Method.

शै. साधने Teaching Aids Chart, Chalk, Blackboard.

अध्यापन मुद्दे: Teaching Points Area of trapezium and examples.

गाभाभूत घटक : Core Elements Area of trapezium.

मूल्ये / Value Problem Solving ability.

उद्दिष्टे Objectives	स्पष्टिकरणे Specification
Knowledge :-	1. Students understands the formula for finding the area of trapezium. 2. Student knows the properties of trapezium.
Understanding :-	1. Student grasps the concept that the area of a trapezium. 2. Student understands the relationship between area of trapezium and area of parallelogram.
Application :-	1. Student apply the area formula to solve examples 2. Student finds the missing measurements using properties of trapezium.

आशय/Content

शिक्षक कृती/Teacher Activity

Teachers ask some questions

1. What is the area of parallelogram

2. What is the area of rhombus

3. What is the area of right angled triangle.

Statement of Aim :-

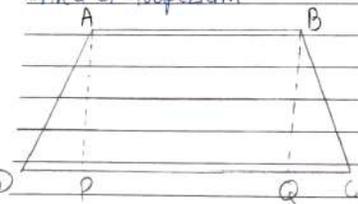
Today we are going to study

Presentation :-

Teacher writes the name of

15. Area

*Area of trapezium



Draw seg AP \perp seg DC and
seg BQ \perp side DC.

Let $\angle(AP) = \angle(BQ) = h$

Height of the trapezium is
the distance between the parallel
sides. After drawing the \perp 's in
ABCD, its area is divided into
parts.

of these $\triangle APD$ and $\triangle BQC$
right angled triangles

Teacher explain the diagram

विद्यार्थी कृती/Student Activity

to students.

area

Student answers area of
parallelogram = base \times height.
Student answers area of
rhombus = $\frac{1}{2} \times$ product of

lengths of diagonals.

angled triangle.

Student answers area of right
angled triangle = $\frac{1}{2} \times$ product of
sides making right angled.

area of trapezium

Students listen carefully.

lesson on board.

Students observe carefully.

of trapezium

Students listen carefully.

आशय/Content	शिक्षक कृती/Teacher Activity
<p>$\square ABQP$ is a rectangle. points P and Q are on seg DC.</p> <p>Area of trapezium ABCD</p> $= A(\triangle APD) + A(\square ABQP) + A(\triangle BQC)$ $= \frac{1}{2} \times d(CD) \times h + d(PQ) \times h + \frac{1}{2} \times d(QD) \times h$ $= h \left[\frac{1}{2} d(CD) + d(PQ) + \frac{1}{2} d(QD) \right]$ $= \frac{1}{2} \times h [d(CD) + 2d(PQ) + d(QD)]$ $= \frac{1}{2} \times h [d(CD) + d(PQ) + d(AB) + d(QD)]$ $\therefore d(PQ) = d(AB)$ $= \frac{1}{2} \times h [d(CD) + d(PQ) + d(QD) + d(AB)]$ $= \frac{1}{2} \times h [d(CD) + d(AB)]$ <p>$(\square ABCD) = \frac{1}{2} (\text{sum of the lengths of parallel sides}) \times h$</p> <p>Area of the trapezium</p> $= \frac{1}{2} \times \text{sum of the lengths of parallel sides} \times \text{height}.$	<p>Teacher explain the steps of finding area of parallelogram.</p> <p>Teacher writes the formula for area of the trapezium</p> <p>Today we have learnt about area of trapezium. We will study more examples based on area in next lecture.</p>

विद्यार्थी कृती/Student Activity	
Students listen carefully.	<p>संकलन/(Recapitulation)</p> <p>1. What is the formula for finding the area of trapezium?</p> <p>2. Can you explain the difference between a trapezium and a parallelogram?</p>
Students listen and observe carefully.	<p>उपयोजन/(Application)</p> <p>1. A trapezium has one side length of 5cm, another side length of 8cm, & a height of 6cm. Calculate its area.</p>
	<p>स्वाध्याय/(Home Assignment)</p> <p>Draw a label diagram of trapezium with bases of lengths 10cm & 15cm & a height of 8cm. Calculate its area.</p>

इयत्ता / Class: 8th

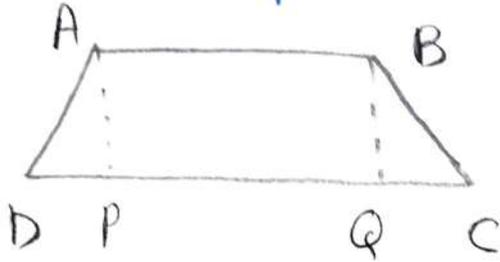
विषय Sub.: Mathematics दिनांक Date 5/1/24

तुकडी / Div: A

घटक Unit: Area
उपघटक Subunit: Area of Trapezium

15. Area

*Area of Trapezium :-



Area of Trapezium = $\frac{1}{2}$ sum of the lengths of parallel sides \times height.

**INTERNSHIP PROGRAMME
EVALUATION SCHEME**

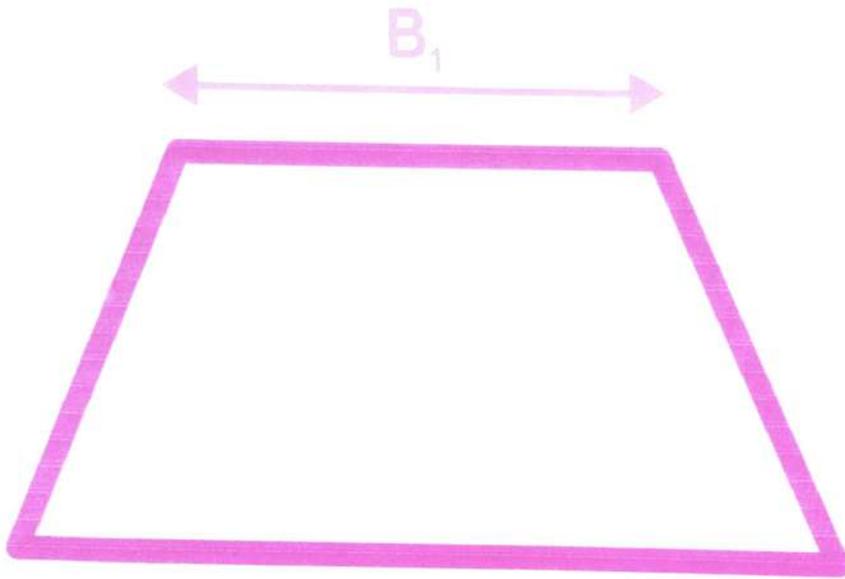
Rating Scale 1) unsatisfactory 2) Average 3) Satisfactory 4) Good 5) Excellent

No.	Steps	Criteria	1	2	3	4	5
1	Lesson Note	Neat, Correct and Complete.					
2	Introduction	Relevant and stimulating					
3		Revival of previous knowledge and linking with the topic					
4		Statement of Aim and Title writing					
5	Presentation	Clarity and Fluency in / Narration / Illustration					
6		Questions - Clear, Concise and grammatically correct					
7		Logical and thought provoking questions					
8		Distribution of questions and Reinforcement					
9		Black Board Work					
10		Clarity and Reading / Demonstration					
11		Classroom interaction					
12		Use of Teaching Aids / Use of Examples					
13		Mastery over the content					
14		Classroom Management					
15		Time Management					
16	Recapitulation	Student's response					
17	Application	Appropriate / Creative application					
18		Appropriate / Activity based Home work					
19	Home Work	Inclusion of core elements values and Life Skills					
20		Overall impression					
Total Marks - 100							

Qualitative Feedback, (if any) :

Area Of A Trapezium

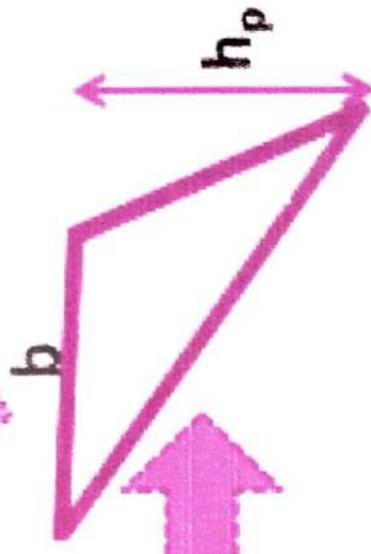
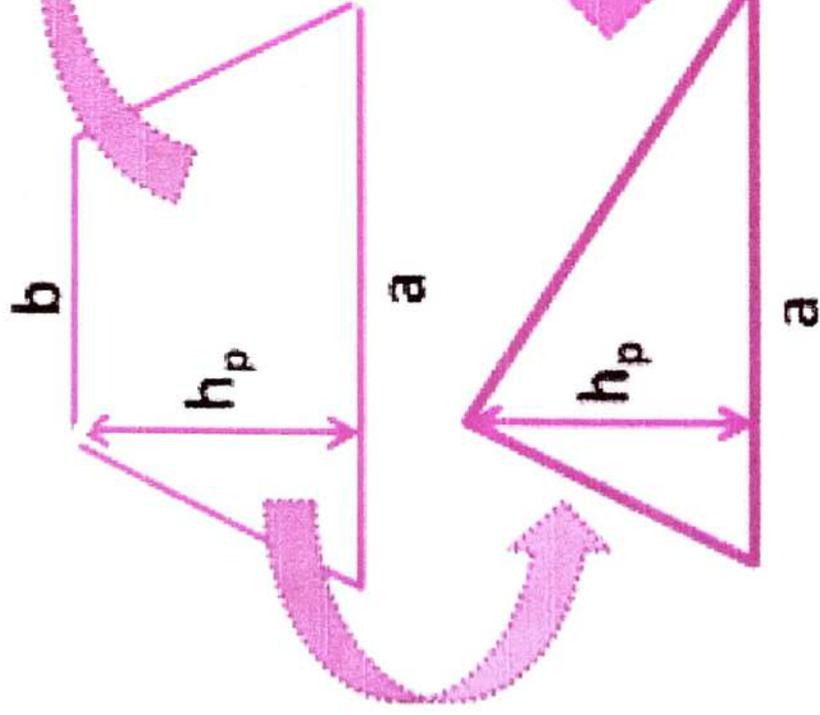
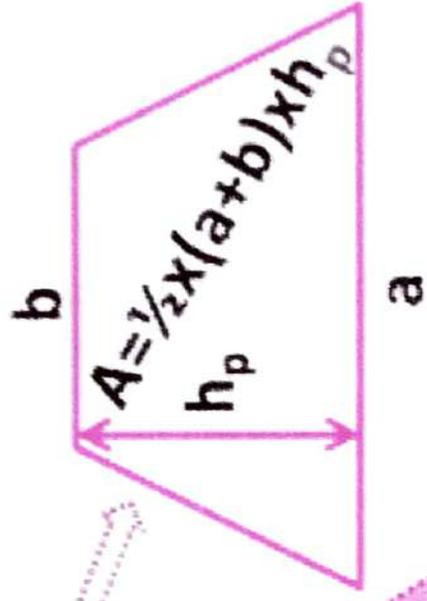
A trapezium (also known as a trapezoid) is a quadrilateral shape with exactly one pair of parallel sides. The other two sides are called the bases and the non-parallel sides are called the legs.



$$\text{Area} = \frac{1}{2} \times (B_1 + \quad) \times$$

Prove the area of a trapezium: 'Simplifying proofs'

$A = \frac{1}{2} \times (a+b) \times \text{perpendicular height}$



$$A = \frac{1}{2} \times a \times h_p + \frac{1}{2} \times b \times h_p$$

$$A = \frac{1}{2} h_p (a+b)$$

Factorise

$$A = \frac{1}{2} (a+b) h_p \quad \square$$

