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## CHEMBUR SARVANKASH SHIKSHANSHASTRA MAHAVIDYALAYA

## TECHNOLOGY BASED LESSONS

Name : Rehmani Afsana Haqiqullah<br>Year : S.Y.B.Ed

Roll No : 29

Name of Internship School :Tilak Nagar Mumbai Public School

Elective Course 2 ( EC - 2 )
Pedagogy of School Subject : Mathematics
Method Master : Prof. Vibhawari Shigwan

Date : $29 / 06 / 24$


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CHEMBUR EDUCATION SOCIETMYY


CHEMBUR SARVANKASH SHIKSHANSHASTRA MAHAVIDYALAYA

## PEDAGOGY OF SCHOOL SUBJECT: MATHEMATICS

## Technology Based Lesson Plans



TEACHER INCHARGE: PROF. VIBHAWARI SHIGWAN
name of student teacher: Kainat Saryed


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\text { ROLL NO : } 33
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Mahavidyalaya Ramkrishnar. Chemburkar Marg Chembur Naka, Mumbai 40007

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CHEMBUR SARVANKASH SHIKSHANSHASTRA MAHAVIDYALAYA

## TECHNOLOGY BASED LESSONS

Name : Kainat sayyed

Year: S.Y.B.Ed

Roll No : 33
Name of Internship School : MPS school, Matunga.
Elective Course 2 (EC-2)
Pedagogy of School Subject : Mathematics
Method Master : Prof. Vibhawari Shigwan

29/06/2024
Date :


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Mahavidyalaya
Ramkrishnan Chemburkar Marg,
Shembur Naka, Mumbai 400071

## TECINOIO(;YBASEI)IESSONS

## INDEX

| Sr. no. | Tittle of lesson | Link | Application |
| :---: | :---: | :---: | :---: |
| 1. | Pythagoras theorem | https://youtu.be/uMwaQY J4iRc? feature= <br> shared | Benime/App based |
| 2. | Polygon | $\begin{aligned} & \text { https://create.kahoot.it/share/polygon/c52 } \\ & 4 \mathrm{fc} 26-575 \mathrm{~b}-45 \mathrm{~d} 0-85 \mathrm{~b} 4-9580 \mathrm{~d} 7 \mathrm{c} 44555 \end{aligned}$ | Kahoot/App <br> based |
| 3. | Circle | https://ed.ted.com/on/ZdUv5Y2L | Ted.Ed/Video based |
| 4. | Polygon | https://edpuzzle.com/join/dezonin | Edpuzzle/Video based |
| 5. | Matrices | https://edpuzzle.com/embed/assignments/ 6644748792 cb 79576077 ce3f/watch | Edupuzzle/Vide o based |

Chembur Education Society's
Chembur Sarvankash ShikshanShastra Mahavidyalaya
F.C. Marg, Chembur Naka, Chembur- 400071


## APP Based Lesson

Name of the Learner: - Kainat Sayyed
Lesson Title: - Pythagoras Theorem
Subject: - Mathematics
Name of the App: - Benime
Grade Level: - 7th
Duration:-41 secs
learning Objective: -

## Knowledge:

- The pupil remembers the types of triangle.
- The pupil recalls the right angle triangle.


## Understanding:

- The pupil develops the understanding of Pythagoras theorem.
- The pupil describes various properties of right angle triangle.


## Application:

- The pupil illustrate difference between right angie triangle \& other triangle tỵpes.
- The pupil analysis the concept of Pythagoras theorem.


## Skill:

- The pupil draw diagram for theorem.

Materials: Nil

Technology Requirements: Internet/Wifi connection, Laptop/Smartphone.

Preparation: Not required

Instructional Steps/अनुदेशनात्मक पायन्या


| Pre-App <br> Discussion | - Teacher discusses the importance of inderstanding pythagoras theorem. |
| :--- | :---: |
| App <br> Exploration | - Teacher shows the App based concent for pythagoras theorem. |
| Guided <br> Activities | - Teacher guides the students to solve the question. |


| Reflection and <br> Discussion | - Teacher discusses about the concept of right angle triangle. |
| :--- | :---: | :---: |
| Extension <br> Activities | - Teacher discusses more types of triangle with the students. |
| Assessment | - Teacher checks the answers given by the student to asses them. |
| Closure | -Summarize the concept of theorem and provide them more sums related to <br> topic. |

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Chembur Sarvankash Shikshanshastra



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R.C. Marg, Chembur Naka, Chembur 100071

## APP Based Lesson

Name of the Learner: - Kainal sayyed
Lesson Title: - Polygons
Subject: - Mathematics
Name of the App: - Kahoot
Grade Level: - 6th
Duration: - NIL

## Learning Objective: -

## Knowledge:

- The pupil remembers the basic Names of shapes
- The pupil recalls the shapes


## Understanding:

- The pupil develops the understanding of different shape Names
- The pupil able to understand different sides of shapes.


## Application:

- The pupil applies his/her knowledge and understanding in given Sums.
- The pupil analysis the concept of naming polygons according to their sides.


## Skill:

- The pupil develops practical skills to draw a polygons.
- The pupil draws different shapes.

Materials: Nil

Technology Requirements: Internet/Wifi connection, Laptop/Smartphone.

Preparation: Not required

Instructional Steps /अनदेशनात्मक पाय-या

| Introduction | - Instructional Steps /अनुदेशनात्मक पाय-या |
| :--- | :--- | :--- |



Signature of Teacher


Signature of Guide


Signature of Principal
Principal
Chembur Sarvankash Shikshanshastra

R.C. Marg, Chembur, Mumbai - 400071.


Host
Play solo
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Continue


Polygons have specific names for example. A 3 sided polygon
is

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Polygons are closed figures


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Chembur Kaka, Mumbai 400071

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## Video Based Lesson

Name of the Teacher: Kainat Sayyed
Title of the Video: Circle.
URL of the Video: https://ed.ted.com/on/ZdUv5Y2L
Class Code (If any): - Nil
Link for Sharing (If any) : https://ed.ted.com/on/ZdUv5Y2L
Duration of the Video: 4:10mins
Subject: - Mathematics
Grade Level: 8th

## Learning Objectives:-

## Knowledge:

- The pupil remembers the knowledge of circle.
- The pupil able to recognize the diameter and radius.


## Understanding: -

- The pupil develops an understanding concept of circle.
- The pupil explain the concept of properties of chord.


## Application: -

- The pupil verifies the answer by looking at examples given in a video.
- The pupil analysze the questions asked in a video.


## Skill:

- The pupil develops practical skill of drawing chord and diameter of a circle .



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Chembur Naka. Mumbui 400071

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## Video Based Lesson

Name of the Teacher: Kainat Sayyed
Title of the Video: Polygons.
URL of the Videc : https://edpuzzle.com/join/dezonin

Class Code (If any): - Dezonin
Link for Sharing (If any): https://edpuzzle.com/ioin/dezonin

Duration of the Video: 03:53 mins
Subject: - Mathematics
Grade Level: 6th
${ }^{\text {t }}$ Learning Objectives:-
Knowledge:

- The pupil remember different shapes of figures.
- The pupil recalls the concept sides of different shapes i. e Triangle, square etc.


## Understanding:

- The pupil understands 3D figures.

The pupil describes difference between close and open figures.

## Application: -

- The pupil applies his/her understanding on curve and straight line.
- The pupil analysis the difference between close and open shapes.

Skill:

- The pupil develops practical skill of drawing shapes of polygons.



Signature of Teacher
Summarize the main points covered in the lesson and more 3D images in your surrounding.


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& \text { Chembur Sarvankash ShikshanShastra } \\
& \text { Mahavidyalaya } \\
& \text { R.C. Marg, Chembur Naka, Chembur- } 400071
\end{aligned}
$$ Video Based Lesson

Name of the Teacher: Kainat Sayyed
Title of the Video: Matrices
URL of the Video:
hitps://edpuzz̈le.com/embed

Class Code (If any): o umupnig
Link for Sharing (If any): -
https://edpuzzle.com/embed/assigniments/6644748792cb79576077ce3\}/watch
Duration of the Video: 08:28
Subject: - Mathematics
Grade Level: 7th

Learning Objectives: -
Knowledge:

- The pupil remembers the basic concepts of addition.
- The pupil recalls the concept of Place value.


## Understanding:

- The pupil understands the concept of rows and columns.
- The pupil describes the concept of addition or substraction.


## Application: -

- The pupil applies his/her understanding on solving sums.
- The pupil analysis what is given and what to be find.

Skill:

- The pupil develops practical skill solving matrices.


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CHEMBUR SARVANKASH SHIKSHANSHASTRA MAHAVIDYALAYA

## PEDAGOGY OF SCHOOL SUBJECT: MATHEMATICS

## Technology Based Lesson Plans

$V=$ TéEACHER INCHARGE: PROF. VIBHAWARI SHIGWAN

NAME OF STUDENT TEACHER : ŞHUMAILA SHAIKH

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ROLL NO : 36


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CHEMBUR EDUCATION SOCIETY'S

## CHEMBUR SARVANKASH SHIKSHANSHASTRA MAHAVIDYALAYA

## TECHNOLOGY BASED LESSONS

Name : Shumaila Abdulrashid Shaikh<br>Year : S.Y.B.Ed

Roll No : 36

Name of Internship School :Tilak Nagar Mumbai Public School
Elective Course 2 (EC-2)
Pedagogy of School Subject : Mathematics
Method Master : Prof. Vibhawari Shigwan

Date: $29 / 06 / 2024$.


Signature and Stamp
PRINCIPAL

## TECHNOLOGY BASED LESSONS

## INDEX

| Sr. no. | Tittle of lesson | Link | Application |
| :---: | :---: | :---: | :---: |
| 1. | Three dimensional objects. | https://edpuzzle.com/assignments/65f344 0ae5d90acf32b84766/watch | Edpuzzle |
| 2. | Types of Angles. | https://ed.ted.com/on/nXCBjQ6H | TEDEd |
| 3. | Pythagoras Theorm | https://ed.ted.com/on/1asd5dnW | TEDEd |
| 4. | Rectangular Prism | https://drive.google.com/file/d/17sagFBH 0GyNHvwJiWajJFfJ0m51gY4PK/view?u $s p=$ drivesdk | Benime |
| 5. | Pythagoras Theorm | https://create.kahoot.it/share/pythagoras-theorem/d9c684b5-873b-40a5-ada8- <br> bbd4947f8572 | Kahoot |

# Chembur Education Society's <br> Chembur Sarvankash ShikshanShastra Mahavidyalaya <br> R.C. Marg, Chembur Naka, Chembur- 400071 

## APP Based Lesson

```
Name of the Learner: Shumaila Shaikh
Lesson Title:- Three dimensional shapes
Subject:- Mathematics
Name of the App:- Edpuzzle
Link : https://edpuzzle.com/assignments/65f3440ae5d90acf32b84766/watch Grade Level:- 6 \(^{\text {th }}\)
Duration:- 6 minutes
Learning Objective:-
Knowledge:
The pupil recalls two dimensional objects.
```

Understanding:
The pupil understand about the three dimensional objects.

## Application:

The pupil his/her knowledge and understanding in new and unfamiliar way.

Skill:
The pupil draws diagram of three dimensional object skillfully.

## Materials:

Laptop / Smart phone

## Technology Requirements:

Internet, Wifi connection

## Preparation:

No specific preparation.




## Chembur Education Society's

 Chembur Sarvankash ShikshanShastra Mahavidyalaya R.C. Marg, Chembur Naka, Chembur- 400071
## Video Based Lesson

Name of the Teacher:- Shumaila Shaikh

Title of the Video: Types of angles

URL of the Video: https://ed.ted.com/on/nXCBjQ6H

Class Code (If any):- NIL

Link for Sharing (If any) NIL

Duration of the Video: 5 minutes 22 seconds
Subject: Mathematics
Grade Level: $6^{\text {th }}$

Learning Objectives:-

## Knowledge:

The pupil remembers the concept of lines and rays.

## Understanding:

The pupil understands the concept of different types of angles.

## Application:

The pupil applies his/her knowledge and understanding ing new and unfamiliar situation.

## Skill:

The pupil draws different types of angles skillfully.

Instructional Steps / अनुदेशनात्मक पायन्या

Signature of Teacher



Signature of Principal
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Chembur Sarvankash Shikshanshastra Mahavidyalaya
R.C. Marg, Chembur, Mumbai - 400071

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Chembur Education Society's Chembur Sarvankash ShikshanShastra Mahavidyalaya
R.C. Marg, Chembur Naka, Chembur- 400071

## Video Based Lesson

Name of the Teacher:- Shumaila Shaikh

Title of the Video: Introduction to Pythagoras theorm. URL of the Video:
https://ed.ted.com/on/1asd5dnW
Class Code (If any):- NIL
Link for Sharing (If any) : NIL

Duration of the Video: 2 minutes
Subject: Mathematics
Grade Level: Standard $7^{\text {th }}$
Learning Objectives:-
Knowledge:
The pupil remembers right angled triangle.

## Understanding:

The pupil understands the concept of the concept of hypotenuse and side of triangle.

## Application:

The pupil applies his/her knowledge and understanding in new and unfamiliar situation

Skill:
The pupil solves mathematical problem skillfully.


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LESSON CREATED BY SHUMAILA SHAIKH USING TED-ED'S LESSON CREATOR VIDEO FROM TUTORING HOUR YOUTUBE CHANNEL

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## Video Based Lesson

Name of the Teacher:- Shumaila Shaikh
Title of the Video: Rectangular Prism
URL of the Video:
https://drive.google.com/file/d/17sagFBHOGyNHvwJiWajJFfJOm51gY4PK/view? usp=drivesdk
Class Code (If any):- NIL
Link for Sharing (If any) : NIL

Duration of the Video: 2 minutes 55 seconds

Subject: Mathematics
Grade Level: Standard $6^{\text {th }}$
Learning Objectives:-

## Knowledge:

i. The pupil recalls various three dimensional shapes.
ii. The pupil remembers a rectangle.

## Understanding:

The pupil understands the concept of the concept of edges, vertices and faces.

## Application:

The pupil applies his/her knowledge and understanding in new and unfamiliar situation.

Skill:
The pupil draws the diagram of rectangular prism skillfully.



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## APP Based Lesson

Name of the Learner: Shumaila Shaikh
Lesson Title:- Pythagoras theorem
Subject:- Mathematics
Name of the App:- Kahoot
Link :
https://create.kahoot.it/share/pythagoras-theorem/d9c684b5-873b-40a5-ada8bbd4947f8572

Grade Level:- $7^{\text {th }}$
Duration:- 2 minutes
Learning Objective:-

## Knowledge:

The pupil remember different types of triangles.

Understanding:
The pupil understand about the concept of Pythagoras theorem.

## Application:

The pupil applies his/her knowledge and understanding in new and unfamiliar way.

## Skill:

The pupil solves problems skillfully.

## Materials:

Laptop / Smart phone

## Technology Requirements:

Internet, WiFi connection

## Preparation:

No specific preparation.

| Instructional Steps /अनुदेशनात्मक पायन्या |  |
| :--- | :--- |
| Introduction | Teacher greets the students and draws three different types of triangles. |
| Pre-App <br> Discussion | Teacher discuss about right angled triangle. |
| App <br> Exploration | Teacher shows the App based video on the topic and discusses important <br> points with the students. |
| Guided <br> Activities | Teacher helps student to understand about hypotenuse of a right angled <br> triangle. |
| Reflection and <br> Discussion | Teacher discusses about various examples of Pythagoras theorem <br> Assessment <br> Closure <br> Activities |
| Teacher takes quiz on the topic. |  |
| right angled triangle or not. |  |



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Pythagoras theorem was given by

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Which triangle is more focused in Pythagoras theorm？


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## TECHNOLOGY BASED LESSONS

Name of the Student Teacher: Vishwakarma Sheela Akhilesh

## S.Y.B.Ed (English medium)

Roll No.: 44
$2^{\text {nd }}$ Method: Mathematics
$4^{\text {th }}$ Sem Internship Programme

DATE: 29100124

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and
Chembur Sarvankash Shikshanshastra
Mahavidyalaya
Ramkrishnan Chemburkar Marg,
Thembur Naka. Mumbai 400 O71

## INDEX

| Sr.No | Lesson Name | Link | Application |
| :---: | :---: | :---: | :---: |
| 1. | Video based lesson 1 <br> - Triangle \& it's types <br> - Std $-6^{\text {th }}$ | https://edpuzzle.com/ass ignments/65f08533c1ae8 d023861ed20/watch | ED Puzzle |
| 2. | Video based lesson 2 <br> - Line And angles <br> - Std-7 ${ }^{\text {th }}$ | https://ed.ted.com/on/o tlboOEE | $\begin{aligned} & E D \\ & T E D \end{aligned}$ |
| 3. | App based lesson 3 <br> - Compound Interest <br> - Std- $8^{\text {th }}$ | https://youtu.be/dlpyqH kurgE?feature=shared | $\begin{gathered} \text { BENI- } \\ M E \end{gathered}$ |
| 4. | App based lesson 4 <br> - Triangle \& it's types <br> - Std - $6^{\text {th }}$ | https://create.kahoot.it/s hare/angles-and-it-s-type/9fd30dff-d222-4ba4-aae9-22e18e34f815 | KAHOOT |
| 5. | Video based lesson 5 <br> - Co-ordinate Geometry <br> - $\operatorname{Std}-\mathbf{9}^{\text {th }}$ | https://edpuzzle.com/ass ignments/66486c0d96a03 f0a3ad0909e/watch | ED PuZzLE |

# Chembur Education Society's Chembur Sarvankash ShikshanShastra Mahavidyalaya R.C. Marg, Chembur Naka, Chembur- 400071 <br> <br> Video Based Lesson 

 <br> <br> Video Based Lesson}

## Lesson No. 01

Name of the Teacher:- Vishwakarma Sheela Akhilesh
Title of the Video: Triangles And Types of triangle
URL of the Video:https://edpuzzle.com/assignments/65f08533clae8d023861ed20/watch
Class Code (If any):- uttasuj
Link for Sharing (If any):-
Duration of the Video:- 2 Min. 50 sec .
Subject:- Mathematics
Grade Level:- $6^{\text {th }}$
Learning Objectives:- Cognitive, Psychomotor, affective
Knowledge: students will able to recognize the shape of triangle.

Understanding: 1 . Students will be able to explain the structure of triangle.
2. Students will be able to explain the perimeter of triangle.

Application: Students will learn the common rules for solving the problems, based on Triangles and its properties and will develops interest will become logical.

Skill: 1. The students applies skill of mathematics.
2. The Students draws diagram accurately.



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> Open ended question

00:27


## To Complete

Open ended question
02:05


Equilateral Triangle

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## To Complete

Multiple choice question
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02:48
02:50
$\bullet$

To Complete

Open eppded question

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Thembur Naka, Mumbai $40007{ }^{\prime}$

# Chembur Education Society's ChemburSarvankash ShikshanShastra Mahavidyalaya <br> R.C. Marg, Chembur Naka, Chembur-400 071 

Video Based Lesson

## Lesson No. 02

Name of the Teacher:- Vishwakarma Sheela Akhilesh
Title of the Video:- Lines and Angles
URL of the Video:-https://ed.ted.com/on/otLboOEE

Class Code (If any):-
Link for Sharing (If any):-
Duration of the Video:- 4 Min. 38 sec .
Subject: Mathematics
Grade Level: $7^{\text {th }}$
Learning Objectives:-Cognitive, Psychomotor, affective
Knowledge: students will able to Recalls \& Recognizes basic terms of geometry.
Understanding: 1.Students will be able to finds the complementary or supplementary angles for the given angles.
2.Students will be able to identifies corresponding angles, interior angles, alternative angles and vertically opposite angles in a given figure.

Application: 1.Students applies knowledge and skills in real-life examples.
2.Students applies the properties of lies and angles in solving problems related to lines \& angles.

Skill: 1. The students develops accuracy in using geometrical instruments like Rulers, protractor etc.
2.The Students draws diagram accurately.




Signature of Teacher


Signature Of Guide


Signature of Principal
Printing! Chembur Savant!: M… R.C. Marg, .400077.


Watch Think
Discuss
...And Finally


Watch Think Discuss ...And Finally

## (3)

Which types of lines are there ?


Watch Think Discuss ...And Finally


Watch Think Discuss ...And Finally

If two lines intersect, then the vertically opposite angles are equal
(A) True
(B)
False

# Chembur Education Society's Chembur Sarvankash ShikshanShastra Mahavidyalaya <br> R.C. Marg, Chembur Naka, Chembur- 400071 <br> APP Based Lesson 

Lesson No. 03

Name of the Learner: Vishwakarma Sheela Akhilesh
Lesson Title:- Compound Interest
Subject:- Mathematics
Name of the App:- Benime
Grade Level:- $8^{\text {th }}$
Duration:- 2 Min. 42 sec .
Learning Objective:-Cognitive, Psychomotor, affective
Knowledge: 1 . Students will be able to recall compound interest.
2. Students will be able to recognise the concept of interest and its formation of Formula.

Understanding: 1 . Students will be able to explain and understand the compound interest. 2. Students will be able to classify the formula of compound interest.

Application: 1. Students will be able to demonstrate its application.
2. Students will be able to use the knowledge they learned about compound Interest.

Skill: 1 . Students will be able to practice more questions, after understanding the concept. 2. Students will be able to perform their skills.

## Materials:-

- Tablets or smartphones with the selected financial calculator app installed (e.g., Compound Interest Calculator, WolframAlpha, or a custom-built app)
- Internet access
- Notebooks and pens


## Technology Requirements:-

1. Computers or Tablets
2. Internet Access
3. Financial Calculator Apps
4. Discussion forums

## Preparation:

* Slides/Presentations
* Install necessary apps
* Hands on Activity

|  |  |  |
| :---: | :---: | :---: |
| Introduction | - Once upon a time in the bustling town of Prosperville, two friends, Ben and Sarah, both received $\$ 1,000$ as a graduation gift. Eager to make their money grow, they visited the local bank for advice. <br> - At the bank, they met Mrs. Carter, a wise financial advisor. She explained the concept of compound interest to them. <br> - "Imagine," she said, "that you both decide to invest your $\$ 1,000$ in our savings account, which offers a $5 \%$ annual interest rate, compounded yearly." | Compound Interest Formuta $C_{-} \\|=P(1+r)^{n t}$ <br> - $A=$ is the amount of money accumulated after $n$ years, including interest. <br> - $\mathrm{P}=$ is the principal amount (the initic amount of money). <br> - $\mathrm{R}=$ is the annual interest rate (decimi <br> - $\mathrm{n}=$ is the number of times that intere compounded per year. <br> - $t=$ is the number of years the money invested or borrowed for. |
| Pre Disc | Draw a graph showing the growth of money with simple interest and compound interest over time. Highlig the exponential growth of compound interest compared to the linear growth of simple interest. <br> SIMPLE CALCULATIONS: <br> - Walk through a basic example: If you invest $\$ 1,000$ at a $5 \%$ annual interest rate, compounded annu for 3 years. <br> $>$ Year $1: \$ 1,000 * 1.05=\$ 1,050$ <br> $>$ Year $2: \$ 1,050 * 1.05=\$ 1,102.50$ <br> $>$ Year $3: \$ 1,102.50^{*} 1.05=\$ 1,157.63$ <br> - Emphasize how the interest earned each year increases because it is calculated on the new total. |  |
| App Explorat | Show students how to use the app to calculate compound interest. Demonstrate by inputting the principal, interest rate, number of times interest is compounded per year, and the number of years. |  |
| Guided Activities | - Present a scenario: "Imagine you have just received a windfall of $\$ 5,000$. You want to invest this money to maximize its growth over the next 20 years. Your goal is to choose the best investment option based on different interest rates and compounding frequencies. <br> - "Explain that students will research different investment options and use their knowledge of compound interest to determine which option is the best. |  |
| Reflection and Discussion | Ask students to discuss their findings and any patterns they noticed. Discuss the impact of different compounding frequencies (e.g., annually, semi-annually, quarterly, monthly). |  |
| Extension Activities | Students will work in pairs or small groups using the app to solve a set of problems provided by the teacher. Each problem should involve different principal amounts, interest rates, and time periods. |  |


| Assessment | - Monitor students during hands-on practice and group discussions. |
| :--- | :--- | :--- |
| Review the homework worksheet to assess understanding and provide feedback. |  |
| Closure | - Highlight the difference between simple interest and compound interest. |
|  | - Emphasize the power of compound interest in growing savings and investments over time |
|  | Discuss the impact of different compounding frequencies on the final amount. |




# Chembur Education Society's <br> Chembur Sarvankash ShikshanShastra Mahavidyalaya <br> R.C. Marg, Chembur Naka, Chembur- 400071 

## APP Based Lesson

## Lesson No. 04

Name of the Learner: Vishwakarma Sheela Akhilesh

Lesson Title:- Triangles And Types of triangle
Subject:- Mathematics
Name of the App:- Kahoot
Grade Level:- 6 $^{\text {th }}$
Duration:- 2 Min. 50 sec .
Learning Objective:-Cognitive, Psychomotor, affective
Knowledge: students will able to recognize the shape of triangle.
Understanding: 1. Students will be able to explain the structure of triangle.
2. Students will be able to explain the perimeter of triangle.

Application: Students will learn the common rules for solving the problems, based on Triangles and its properties and will develops interest will become logical.

Skill: 1. The students applies skill of mathematics.
2. The Students draws diagram accurately.

Materials:- Rulers, colored pencils or markers, protractors, Triangle cut-outs (PAPER), Worksheet with exercise, Smartboard/Whiteboard, COMPUTER/SMARTPHONE.

## Technology Requirements:-

> Video Introduction: Engages students and provides a visual context.
> Interactive Whiteboard: Facilitates dynamic and interactive teaching.
$>$ GeoGebra: Provides hands-on experience with drawing and measuring triangles.
> Google Forms and Kahoot!: Enables interactive and immediate assessment of understanding.

## Preparation:

. Content Review and Planning
2. Gathering Material
$\checkmark$ Digital Tools and Devices
Software and Applications
3. Creating and Organizing Content
4. Setting Up Activities: Kahoot Quiz, GeoGebra Activity

|  |  |
| :---: | :---: |
| Introduction | Show image of various objects that includes triangles, such as : <br> 1. A Slice of pizza <br> 2. Traffic signs <br> 3. The Eiffel Tower <br> 4. Pyramids <br> 5. Slice of cake |
| Pre-App Discussion | 1. Students should be familiar with basic geometric shapes such as Square,rectangles, circles and polygons. <br> 2. Understanding about that shapes are defined by their sides and angles. <br> 3. Basic skills in using a ruler to measure lengths. <br> 4. Knowledge of basic angles types i.e. $90^{\circ},<90^{\circ},>90^{\circ}$ <br> 5. To draw basic geometry using a ruler. <br> 6. Engage students in a discussion about their previous experiences with drawing andmeasuring shapes. |
| App <br> Exploration | To guide students through educational app that demonstrates various types of angles. |
| Guided Activities | So, students how to use rulers and Protractor to measure angles to draw different types of triangles. GROUP WORK: <br> - Divided the students 3-4 small groups and provide the material. <br> - Students will use a protractor to measure the angles of each triangle they drew. <br> - They will classify each triangle as acute, right or obtuse and label the anglesaccordingly. <br> - Provide groups with triangle cut-outs of various sizes and shapes. <br> - Students will sort these triangles into categories based on their angles (Acute, Right,Obtuse). <br> - They will record their classification on a worksheet. |
| Reflection and Discussion | A triangle has three sides, three vertices and three angles. The sum of the three angles of a triangle is always $180^{\circ}$ The sum of the length of two sides of triangle is always greater than the length of the third side. |
| Extension Activities | Distribute small triangles cut - outs ( Each Type: Right, Acute, Obtuse ) to each students orgroup. Ask students to examine their triangles and discuss what they notice about theangles. Prompt them to compare their triangle with those of their peers to noticedifferences and similarit |
| Assessment | FORMATIVE: Observe student participation during the GeoGebra activity, Monitor groupdiscussions and review the digital worksheet and Kahoot! quiz results. <br> SUMMATIVE: Use the exit ticket responses to gauge overall understanding and identify areas for furth |
| Closure | 1. Definition of triangle and its classification by angles. <br> 2. Parts of triangle. <br> 3. Sum of angles, perimeter of triangles, area of triangle. |




# Chembur Education Society's Chembur Sarvankash ShikshanShastra Mahavidyalaya <br> R.C. Marg, Chembur Naka, Chembur- 400071 <br> <br> Video Based Lesson 

 <br> <br> Video Based Lesson}

## Lesson No. 05

Name of the Teacher:- Vishwakarma Sheela Akhilesh
Title of the Video:- Co-ordinate geometry
URL of the Video:- https://edpuzzle.com/assignments/66486c0d96a03f0a3ad0909e/watch
Class Code (If any):- jomelul
Link for Sharing (If any):-
Duration of the Video:-6 Min. 39 sec .
Subject: Mathematics
Grade Level: $9^{\text {th }}$

## Learning Objectives:- Cognitive, Psychomotor, affective

Knowledge: 1. Pupil will able to recalls \& recognizes coordinate axes.
2. Pupil will able to recalls \& recognizes points in a plane.

Understanding: 1. Pupil will able to write the coordinates of the points marked on the axes.
2. Pupil will able to marks the points in a plane when coordinates are given.

Application: 1. Pupil will able to applies knowledge and skills in real-life situations.
2. Pupil will able to applies knowledge and skills in organizing his ideas more logically and Express his thoughts more accurately.

Skill: 1. Pupil will able to develops analytical skills.
2. Pupil will able to develops techniques and skills in coordinate geometry.

| Instructional Steps / अनुदरे ना Student's Answer |  |  |
| :---: | :---: | :---: |
| Introduction | Teacher's Question | It is the oldest branch of the mathematics. |
|  | 1. Can any one tell me meaning of geometry? <br> 2. Can you defined any one else ? <br> * There are many kinds of geometry like inclined geometry, Non-inclined geometry \& co-ordinate geometry etc. | Geometry is the study of shapes \& sizes in various dimensions. |
| Pre Viewing Discussion | $>$ To understand the concept of coordinate geometry. <br> ) Explain the Cartesian system. <br> > Measure the perpendicular distance of a point from coordinate axe <br> > Plot a point in a plane if its coordinate are known. <br> >Define the terms used in coordinate geometry. |  |
| Video Viewing | - Explain the Cartesian plane: $x$-axis, $y$-axis, and origin. <br> - Introduce the concept of coordinates and how to write them as $(x, y)$. Use a visual aid to show the Cartesian plane and demonstrate how to plot points. <br> - Provide examples of points in different quadrants. |  |
| Post-Viewing Discussion | 1. Create a video that explains the Cartesian plane in detail. <br> 2. Demonstrate how to plot points using examples. <br> 3. Explain the concepts of quadrants and how coordinates are written as $(x, y)$. |  |
| Extension Activities | - Show a video segment with step-by-step instructions on how to plot points. <br> - Provide a worksheet or use an interactive tool for students to plot given points on the Cartesian plane. <br> otting: Students plot the points on their graphs using different colors for different sets of oints. <br> alculations: Students calculate the distances between specific points and find midpoints of ven line segments. <br> nswering Questions: Students answer the questions provided on the worksheet. |  |
| Assessment | - Evaluate students' understanding throu <br> - Review and provide feedback on the plo calculations. <br> - Check homework for accuracy and comp | gh their participation in class activities. otted points, distance, and midpoint <br> prehension. |
| Conclusion and Reflection | Through the study of coordinate geometry, we'v <br> - Plot points on the Cartesian plane. <br> - Calculate the distance between points usin <br> - Determine the midpoint of a line segme | ve learned to: <br> using the distance formula. nt using the midpoint formula. |

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Mahavidyalaya
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To Complete

Multiple choice question

Multiple choice question

Class 9 Maths - Coordina...



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| :--- | :--- |
| Multiple choice question | $05: 06$ |



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Ramkrishnan Chemburkar Marg,
Chembur Naka. Mumbsi 400 674


## CHEMBUR EDUCATION SOCIETY'S

PEDAGOGY OF SCHOOL SUBJECT: MATHEMATICS

## Technology Based Lesson Plans

$v=$ TeACHER INCHARGE : PROF. VIBHAWARI SHIGWAN

## NAME OF Student teacher: Minal Mangesh Jadhav



ROLL NO: 11

PRINCIPAL
Chembur Sarvankash Shitshanshastra
Mahavidyalaya Ramkrishnan Chemburkar Marg, Ramkrishnak Mumbei 408071
-

## TECHNOLOGY BASED LESSONS

## Name : Minal Mangesh Jadhav.

Year : S.Y.B.Ed

Roll No: 11

Name of Internship School : L. K. Waghji Mumbai Public School
Elective Course 2 (EC-2)
Pedagogy of School Subject : Mathematics
Method Master : Prof. Vibhawari Shigwan

Date: $03 / 07 / 24$

Signature and Stamp PRINCRPAL
Chembur Sarvankiech Shitsshanshastra
Mahavidyalaya
Ramkrishnan Chemburkar Marg,
Shembur Naka. Mumbai 400 07"

## TECHNOLOGY BASED LESSONS

## INDEX

| Sr. no. | Tittle of lesson | Link | Application |
| :---: | :---: | :---: | :---: |
| 1. | Profit \& Loss | $\begin{gathered} \text { https://youtu.be/tNUXENCrOvM?si=AAEudpoT7B } \\ \text { GjBkb8 } \end{gathered}$ | Benime app |
| 2. | Banks \& simple interest | https://ed.ted.com/on/1xUxKegZ | Ted.ed |
| 3. | Operations <br> on rational numbers | https://edpuzzle.com/assignments/65f9b618154950 c5fe5b442c/watch | Edpuzzle |
| 4. | Compound interest | https://ed.ted.com/on/dKZPxzmY | Ted.ed |
| 5. | Operations <br> on rational numbers | https://create.kahoot.it/share/operation-of-rational-numbers/a5ab8de4-43c1-430b-89c6-c5de951f44e8 | Kahoot app |

# Chembur Education Society's <br> Chembur Sarvankash ShikshanShastra Mahavidyalaya <br> R.C. Marg, Chembur Naka, Chembur- 400071 

## APP Based Lesson 1.

Name of the Learner: Minal Mangesh Jadhav
Lesson Title:- Profit \& Loss
Subject:- Mathematics
Name of the App:-Benime app
Grade Level:- 6th
Duration:- 3:51 minutes
Learning Objective:-

## Knowledge:

The pupil remembers the concept of profit and loss

## Understanding:

The pupil develop understanding the concept of profit and loss

## Application:

The pupil applies their knowledge \& understanding of profit and loss in a new situation

## Skill:

The pupil develops analytical skills to solve the profit and loss problems

## Materials:-

Laptop, Projector.

## Technology Requirements:

Internet/wi-fi connection

Preparation: Not specific preparation is require.

| Instructional steps /अनुदेशनात्मक पायन्या |  |
| :--- | :--- |
| Introduction | Teacher narrate a short story, Riya had bought 10 pens <br> at Rs. 100 and sold it for Rs. 150. Based on this story <br> teacher ask question to the students that, is this <br> transaction profitable or not? |
| Pre-App <br> Discussion | Teacher explains the meaning of profit and loss with some <br> examples. |
| App <br> Exploration | Teacher presents an app based video on the topic of <br> profit \& loss and discuss an important points of profit <br> and loss with students. |
| Guided <br> Activities | Teacher guides the students in activity of calculating <br> profit and loss worksheets. |
| Reflection and <br> Discussion | Teacher discuss the formula to calculate profit and loss: <br> Profit = Selling price - Cost price <br> Loss = Cost price - Selling price |
| Extension <br> Activities | Teacher gives the problem solving challenge cards <br> on profit and loss to the students. |
| Assessment | Teacher ask some questions to the students: <br> 1) What is profit \& how to calculate it? |
| 2) What is loss \& how to calculate it? |  |



Signature of Teacher


Signature of Guide


Signature of Principal


Vinal Mangesh Jadhav
3.Y.B.Ed (English medium)

Zoll No. 11
Video based lesson no. 1 (Benime App)
Subject - Maths
Topic - Profit-Loss Std - 6th
res

$\Rightarrow$ Gain $=5 P-C P$
$\Rightarrow$ Gain $=5 P-C P$


Chembur Sarvankash Shitshanshastra Mahavidyalaya



## Video Based Lesson

Name of the Teacher:- Minal Mangesh Jadhav.
Title of the Video: Banks \& simple interest

URL of the Video:
https://Youtube.be/axZd-jd4q4E?si=ngKuZBB_akn1BaZX
Class Code (If any):-
Link for Sharing (If any): https://ed.ted.com/on/1xUxKegZ

Duration of the Video: 05:45 minutes
Subject: Mathematics
Grade Level: VII

## Learning Objectives:

Knowledge:
The pupil remembers the knowledge of simple interest

Understanding:
The pupil develop understanding the concept of simple interest.

## Application:

The pupil applies their knowledge and understanding of simple interest in new situations.

Skill:
The pupil develop analytical skills to solve simple interest problems

## Instructional Steps / अनुदेशनात्मक पायन्या


Assessment:- Teacher ask following questions to the students:

1) What is simple interest?
2) How to calculate simple interest?
3) Calculate simple interest \& total amount if $P=5000, N=3 y r s, R=10 \%$

Conclusion and Reflection

From this video we learnt meaning of the simple interest, how to calculate simple interest in a real life situations.


Signature of Teacher


Signature of Guide


Signature of Principal
Principal
Chembur Sarvankash Shikshanshastra Mahavidyalaya
R.C. Marg, Chembur, Mumbai - 400071.


TEDEd

## Banks and

 simple Interest Chapter 10 Mathematics Class 7LESSON CREATED BY MIBAL JADHAXX USING TED-ED'S LESSON CREATOR VIDEO FROM TICTACLEARNENGLUSH YOUTUBE CHANNEL

Let's Begin...
In this video we are going to learn about the simple interest: What is simple interest, how to calculate simple interest, how it related to real life with

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Let's Begin...

simgen inherest how it m


What is princloal amount?
A. Aoroued muner

B Feo
C lown
D Detranowt

How can wex eoply ample interest in out-
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Ramktishnan Chemburkar Marg,
Shembur Naka. Mımba. $40 \cap$ O7:

# Chembur Education Society's 

Chembur Sarvankash ShikshanShastra Mahavidyalaya<br>R.C. Marg, Chembur Naka, Chembur- 400071

## Video Based Lesson

Name of the Teacher:- Minal Mangesh Jadhav.

Title of the Video: Operations on rational numbers

URL of the Video: https://youtu.be/p8NaXHIh_8g?feature=shared

Class Code (If any):- ikikezd

Link for Sharing (If any): https://edpuzzle.com/assignments/65f9b618154950c5fe5b442c/ watch

Duration of the Video: 6:48 minutes
Subject: Mathematics
Grade Level: 7th

Learning Objectives:-
Knowledge:
The pupil remembers the knowledge of the operations on rational number:

Understanding:
The pupil develop understanding of the concept of operations on rational number:

## Application:

The pupil applies their knowledge \& understanding of the operations on rational numbers in new situations.

Skill:
The pupil develop analytical skills to solve operations on rational numbers problem

| Introduction | Teacher narrate a story, Riya has ordered a pizza which is divided into 6 equal parts. 1 piece of pizza she has given to mother, 2 pieces to her brothe \& 1 piece to her father. Based on this story teacher ask some questions: <br> 1) How many pieces of pizza are left? <br> 2) How can we write the distribution of pizza in numbers? <br> So, today we are going to learn about the operations on rational numbers. |
| :---: | :---: |
| Pre Viewing Discussion | Teacher discuss the types of numbers: <br> 1) Natural numbers $-1,2,3,4,5,6 \ldots \ldots \ldots$ <br> 2) Whole numbers $-0,1,2,3,4,5,6 \ldots \ldots$. <br> 3) Integer numbers $-4,-3,-2,-1,1,2,3,4 \ldots .$. <br> 4) Rational numbers $-4 / 5,3.6,6 / 7,2 / 9,6.5 \ldots$ |
| Video Viewing: | Teacher solving the sums; <br> 1) $5 / 7+9 / 11=55+63 / 77=118 / 77$ <br> 2) $2 \star 1 / 7+3^{\star} 8 / 14=15 / 7+50 / 14=40 / 7$ <br> 3) $1 / 7-3 / 4=4-21 / 28=-17 / 28$ <br> 4) $9 / 13^{*} 4 / 7=9^{*} 4 / 13^{*} 7=36 / 91$ <br> 5) $3 / 5^{*}-4 / 5=3^{*}-4 / 5^{*} 5=-12 / 25$ |
| Post-Viewing Discussion: | A rational numbers in maths can be defined as any number which can be represented in the form of $p / q$ where $q$ is not equal to 0 . Also we can say that any fraction fits under the category of rational numbers, where the denominator \& numerator are integer \& denominator is not equal to zero |
| Extension <br> Activities: | Task card activity, it consists of 32 task cards with 8 positive rational numbers 8 negative rational numbers, 8 positive \& negative improper fractions, 8 mixe review cards (repeating decimals, unsimplified fractions etc.) The recording sheet has 4 number lines. The task cards also have pictures in the corner, so students know which number line they should be placing the rational number on students write the rational number in the box connected to it's location on the number line. Answer key is included as well. |
| Assessment: | Teacher ask following questions to the students: <br> 1) What is rational numbers? <br> 2) Give the examples of the rational numbers. |
| Conclusion and Reflection | In this video we learnt about the operations on rational numbers, Meaning of the rational numbers, operations of the rational numbers (addition, subtraction, multiplication, division of the rational numbers etc.) |
|  |  |
|  |  |

An Introduction to Rational Numbero...


MUITIPLE CHOICE QUESTION
3)Whole numbers along with numbers form a group called integers.Positive


RationalNaturalNegative

## Rewatch

Submit

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# Chembur Education Society's <br> Chembur Sarvankash ShikshanShastra Mahavidyalaya <br> R.C. Marg, Chembur Naka, Chembur- $\mathbf{4 0 0} 071$ 

Video Based Lesson No. 5

Name of the Teacher:- Minal Mangesh Jadhav
Title of the Video: Compound interest
URL of the Video: https://youtu.be/MbG6JQqbDt8?si=ephB9RAZTHFGsiZa
Class Code (If any):-

Link for Sharing (If any) : https://ed.ted.com

Duration of the Video: 5:25 minutes
Subject: Mathematics
Grade Level: 8th

Learning Objectives:-
Knowledge:
The pupil remembers the knowledge of the compound interest.

Understanding:
The pupil develop understanding the concept of compound interest.

## Application:

The pupil applies their knowledge \& understanding of the compound interest in a new situations.

Skill:
The pupil develop analytical skills to solve the compound interest problems

| Introduction | Teacher narrate a story \& ask some questions based on it; Minal has deposited Rs. 7000 in her saving account after 8 months her saving account balance is Rs. 7300 . <br> 1) What is amount deposited by Minal? <br> 2) After 8 months what was the saving account balance? <br> 3) From where did Rs. 300 came in her saving account? |
| :---: | :---: |
| pre Viewing <br> Discussion | Teacher discuss another example of the interest with students; Reshma had taken loan from a bank of Rs. 50000 for a business \& bank charge interest rate for loan is $10 \%$ per annum. In this situation Reshma has to pay Rs. 50000 along with interest to bank after 1 year. |
| Video Viewing: | While watching video teacher ask some questions to the students; <br> 1) Where does person borrow money? Ans: Bank <br> 2) Why do banks lend money to the person? Ans: To earn interest <br> 3) How many types of interest? Ans: 2 <br> 4) What are the types of the interest? Ans: Simple interest \& Compound interest. |
| Post-Viewing <br> Discussion: | Teacher explain the meaning of the compound interest; Compound interest is the interest calculated on the principal \& the interest accumulated over the previous period. |
| Extension <br> Activities: | Learn compound interest with puzzle activity; <br> Students can arrange the loan amount, time, rate puzzle pieces into the corresponding interest amount. |
| Assessment: | Teacher ask following questions to the students; <br> 1) what is compound interest? <br> 2) What is the formula of calculating amount of the compound interest? <br> 3) What is the formula of compound interest? |
| Conclusion and Reflection | From this video we learnt meaning of the compound interest \& how to calculate the compound interest in a real life situations. |
|  |  |
|  | Princlpal <br> Chembur Sarvankash Shlikshanshastra Mahavidyalaya <br> R.C. Marg, Chembur, Mumbal - 400071. |



# Chembur Chembur Education Society's 

R.C. Marvankash ShikshanShastra Mahavidyalaya
R.C. Marg, Chembur Naka, Chembur- 400071

## APP Based Lesson 2

Name of the Learner: Minal Mangesh Jadhav
Lesson Title:- Operations on rational numbers.
subject:- Mathematics
Name of the App:- Kahoot
Grade Level:- 7th
Duration:- -
Learning Objective:-
Knowledge:
The pupil remembers the concept of operations on rational numbers

## Understanding:

The pupil develop an understanding the concept of operations on rational Application:

The pupil applies their knowledge \& understanding of the operations on
rational numbers Skill:

The pupil develops analytical skills to solve the problems on operations on rational numbers.

Materials:-
Mobile phones.

Technology Requirements:
Internet/wi-fi connection

## Preparation:

Not specific preparation is required.

Instructional Steps/अनुदेशनात्मक पायन्या

| Introduction | The teacher narrate a story, Riya has ordered a pizza. Piz- <br> was equally divided into 6 pieces. 1 piece of pizza she has <br> given to her mother, 2 piece of pizza to her father. <br> Based on this story teacher ask some questions: <br> 1) How many pieces of pizza are left? <br> 2 <br> How can we write the distribution of pizza in numbers? |
| :--- | :--- |
| Pre-App <br> Discussion | Teacher explains the meaning of operations on rational <br> numbers. |
| App <br> Exploration | Teacher presents an app based quiz with solution on the <br> topic of operations on rational numbers. |
| Guided <br> Activities | Teacher guides the students in activity of solving problems <br> on the operations on rational numbers worksheets. |


|  |  |
| :--- | :--- |
| Reflection and <br> Discussion | Teacher use problem solving method \& solve the illustrations <br> of rational numbers on board. |


|  | Extension |
| :--- | :--- |
| The teacher gives the problem solving challenge cards or |  | Activities operations on rational numbers to the students.

Assessment $\quad$ Teacher ask following questions to the students:

1) What is rational numbers?
2) Give the examples of the rational numbers.

Closure numbers \& provide sums on it to sol
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Signature of Principal
Pincelpal

Kahoot!


Operation of rational numbers


3 plays. 3 players
(1) A public kahoot

minaljadhav7_gmall
Updated 2 months ago

Questions (10)
1-Quiz

1) $1,2,3,4 \ldots \ldots$ are called as a numbers

Show answers

$<$

© $\%$ create.kahootit/share + (0
Kahoot!


## Study modes



## TECHNOLOGY BASED LESSONS

## INDEX

| Sr. no. | Tittle of lesson | Link | Application |
| :---: | :---: | :---: | :---: |
| 1. | Number Line Grade $6^{\text {th }}$ | https://edpuzzle.com/ioin/fuzpivo <br> Class Code : fuzpivo | Edpuzzle <br> (Video based lesson) |
| 2. | Mean, Median <br> Mode and Range Grade $7^{\text {th }}$ | https://ed.ted.com/on/mK6WcSee | Ted.Ed (Video based lesson) |
| 3. | Mean Median <br> Mode <br> Grade $7^{\text {th }}$ | https://create.kahoot.it/share/mean-median-mode/2ea9c5e4-5aa7-4198-9b79-e97f8d97eb63 | Kahoot (App based lesson) |
| 4. | Algebraic <br> Expressions <br> Grade $7^{\text {th }}$ | https://youtu,be/Y.Joz1.CP9m48? fea ture=shared | Benime <br> (Video based lesson) |
| 5. | Pythagorean theorem Grade $7^{\text {th }}$ | hupsi/led.ted.com/on/di.IBepy9 | Ted.ed <br> (Nidea based lesson) |

## Chembur Education Society's Chembur Sarvankash ShikshanShastra Mahavidyalaya R.C. Marg, Chembur Naka, Chembur- 400071 APP Based Lesson

## Name of the Learner: Afsana Rehmani

Lesson Title:- Number Line whole Number Operation
Subject:- Mathematics
Name of the App:- Ed.Puzzle
Grade Level:- 6th
Duration:- 4 min
URL :- https://edpuzzie.com/join/fuzpivo
Learning Objective:-

## Knowledge:

The pupil know the basic mathematical operations.
The pupil has the knowledge of the whole Number

## Understanding:

The pupils develop understanding of concept Number line The pupils develops the understanding of whole number.

## Application:

OThe pupils applies his/herknowledge and understanding of the topic. The pupils applies concept on Numerical.

## Skill:

The pupil applies the skill of mathematics.

## Preparation:

Teacher needs to prepare what is number line and what is whole Number.

Instructional Steps /अनुदेशनात्मकपायन्या

|  | Teacher greets the students and explain the Number line <br> Introduction teacher explain the operations of whole numbers on a Number line |
| :--- | :--- |
| Pre-App <br> Discussion | The teacher discusses about the whole Number <br> And basic mathematical operations. |

Teacher shows the App based video on the topic of Number line.
App Exploration:

Guided
Activities:
Teacher counduct acivities giving them basket of fruit and explain the operation of whole numberon Number line.
Reflection \& Teacher discuss numericals with students.

Discussion:-

Extension
Activities:
Assessment

Teacher give other real life examples.
Teacher discuss numericals with students .

|  |
| :--- |
|  |
| Extension |
| Activities: |

1. What is whole Number .
2. What is Number Line.

Teacher summarize the main points of covered in the lesson.


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What Mumber $\rightarrow 0,1,2,3,4,5 \ldots \quad$ Bo
Naluit Marber $\rightarrow 1,2,9,4,5, \ldots$


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Mahavidyalaya
Rankrishnan Chemburkar Marg,
Shembur Naka, Mumberi 400 07:

## Chembur Education Society's

 Chembur Sarvankash ShikshanShastra Mahavidyalaya R.C. Marg, Chembur Naka, Chembur- 400071
## Video Based Lesson

| Name of the Learner: | Afsana Rehmani |
| :---: | :---: |
| Lesson Title:- | Mean ,Median , Mode |
| Subject:- | MATHEMATICS |
| Name of the App:- | TED.Ed |
| Grade Level:- | TTH STANDARD |
| Duration:- | 4 min |
| URL :- | https://ed.ted.com/on/mK6WcSee |
| Learning Objective:- |  |
| Knowledge: | 1. The pupil remembers the knowledge of basic arthematic. <br> 2. The pupil develops understanding of Average. |
| Understanding: | 1.The pupil understands the concept of Mean ,Median, Mode. |
| Application: | 1. The pupil applies the knowledge of mean in to find the average marks |

Skill:
The pupil solves real Life problems skill fully by using Mean.

Notebook, Pen, Scale, Pencil
Materials:-

Technology Requirements: Smartphone or Laptop, Internet connection.

Preparation:

The teacher needs to prepare all the three concept mean median and mode with relevant examples and teacher needs to know the application of the mean median and mode .




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## Chembur Education Society's

 Chembur Sarvankash ShikshanShastra Mahavidyalaya R.C. Marg, Chembur Naka, Chembur= 400071
## Video Based Lesson

| Name of the Learner: | Afsana Rehmani |
| :---: | :---: |
| Lesson Title:- | Mean ,Median , Mode |
| Subject:- | MATHEMATICS |
| Name of the App:- | Kahoot |
| Grade Level:- | 7TH STANDARD |
| Duration:- | Nit |
| URL:- | https://createkahoot.it/share/mean-median-mode/2ea9c5ed-5aa7-4198-9b79-e9718d97eb63 |

## Learning Objective:-

Knowledge:

Understanding:

1. The pupil remembers the knowledge of basic arthematic.
2. The pupil develops understanding of Average.
3. The pupil understands the concept of Mean ,Median ,Mode.
4. The pupil comapres various average values.

Application:

1. The pupil applies the knowledge of mean in to find the average marks of the students in class.

The pupit solves real life problems skill fully by using Mean.
Skill:

Materials:-

Technology Requirements: Smartphone or Laptop. Internet connection.

Preparation:
No specific preparation


- Teacher gives example of tempreture.

Pre-App - Teacher provide different days of tempreture.
Discussion - Teacher introduce the Concept of Mean.

- Teacher co relate it with Marks.

| App <br> Exploration | * in this video first the statment of Mean shown. <br> - With the help of formula Mean=sum of all observation - <br> Number of observation |
| :--- | :--- |
| Guided | - Teacher gives some problem based on Mean ,Median,Mode. <br> - Teacher measure students height and tell them find a mean |
| Actives |  |

Discussion - This concept used in our daily life.

- Students gives different different examples.

| Extension <br> Activities | - Teacher tells students measure the length of the text book and <br> notebook and find out the mean. <br> Teacher gives the data written in chits and tell them to find out the <br> mode. |
| :--- | :--- |
| Assessment | - Teacher provide various Quiz /MCQ for the under <br> standing of the topic. |
| Closure | - Teacher summaraize the main points of covered in the lesson. |




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Pinclow:


To find the range of the data we substract the smallest value to the $\qquad$ -

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Meatis int sum of at the obvervation upen

2. Quen

To find the range of the deta = sutetract the smalhet vaius to the
3.-Noe orrnt
mirestian mat amatge the data anly in accending artier 7



Mean is the sum of all the observation upon


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Mean, Median, Mode
and Range.

## Mean ,Median,Mode



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Ramkrishnan Chemburkar Marg.
chembur Niska, Mumbel 400071

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## Video Based Lesson

Name of the Teacher:- Afsana Rehmani
Title of the Video:- Algebric Expanslon
URL of the Video;- NII
Class Code (It any):- Nil
Link for Sharing (It any): - Nil
Duration of the Video:- 2 minutes
Subject:- Mathematics
Grade Level:-7th

## Learning Objectives:-

## Knowledge:

- The Pupil remembers the differeptypes of shapes
- The pupil recall the area of square and rectangle formula.


## Understanding:

- The Pupildovelop the understanding the concept
- Thepupitgengrate the equation $(x+y)^{2}=x^{2}+2 x y+y^{2}$


## Application

- The Pupil Applies His/her Knowledge and Understanding of the topic in real life situation.


## Skill:

- The pupil solves mathematical problem skillfully

| Introduction | - Greet Students and introduce the topic Algebric expansion. |
| :--- | :--- |
|  | - Explain the concept and its example. |


| Are Viewing | - Show videos and images of children engaging in various activities. |
| :--- | :--- |
| Discussion | - Ask students to describe what they observe in the activities. |
|  | - Introduce the topic Addition substraction of Monomials, binomials, | polynomials.

- Play a video presentation on the topicAlgebric expansion.
- Teacher provides guided questions to the students to consider while watching.

| Post- | - Teacher leads a discussion on the key concepts presented in the |
| :--- | :--- |
| Viewing | video. |

Discussion:
Extension Activities video.

- Teacher discusses any questions or area of confusion that arose during watching tie video.
$+$

* Teacher provides additional Numerical for better understanding of the topic Algebric Exapnsion.


## Conclusion

 and Reflection- Summarize the main points covered in the lesson.


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Chembur Sarvankash Shlikshanshastra
Mahavidyalaya
R.C. Marg. Chembur, Muribei - 400071


## L. Monomials

Popresiloes with one bern are called monomials.

## 148

$2-7$
$35 / 8$

4. Polynornials

Eypremelons with more than three terms are called polymomials.
$1 a^{2}-5 a^{2} b \cdot 3 a b-b^{3}$
$24 x-7 x^{2}+9-5 x^{-46 x}$



## Types Of Algebrale Expressions

LMonombals
2 Binomials
3. Trinomials
4. polynomials
s

2. Binomials

Eyrespions with two terms are c

1. $2 \mathrm{x}-3 \mathrm{y}$
2. $2 \mathrm{~F} \cdot 2 \mathrm{~b}$
3. $3 \mathrm{mn}-5 \mathrm{~m} / \mathrm{n}$



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Mahavidyalaya
Ramkrishnan Chembuikar Marg,

## Chembur Education Society's

``` Chembur Sarvankash ShikshanShastra Mahavidyalaya R.C. Marg, Chembur Naka, Chembur- 400071
```


## Video Based Lesson

```
\begin{tabular}{ll} 
Name of the Learner & Afsana Rehmani \\
Lesson Title & PYTHAGORAS THEOREM \\
Subject & MATHEMATICS \\
Name of the App & TED.Ed \\
Grade level & TTH STANDARD \\
Duration & 3 min \\
URL & https://ed.ted.com/on/dIJPePV9
\end{tabular}
```


## Learning Objective

```
Knowledge
1. The pupil remembers the knowledge of properties of triangles
2. The pupil recalls sum of angles of a triangle are 180 degree
Understanding: 1.The pupil understands the concept of Pythagoras theorem 2. The pupil illustrates that only right angled triangle is used in Pythagoras theorem
1. The pupil applies the knowledge of Pythagoras theorem to find the shortest distance to reach his destination
1.The pupil solves real life problems skillfully by using Pythagoras theorem by measuring shortest distance to reach destination
Notebook, Pen, Scale, Pencil
Materials:-
Technology Requirements: Smartphone or Laptop, Internet connection.
```


## Preparation:

```
The teacher needs to prepare all the properties of triangles to teach Pythagoras theorem and teacher needs to know the application of theorem in real life situations. Teacher also have to prepare historical background of the theorem
```


## I

Good morning students today we will learn a important theorem related to properties of triangles. So tell me have you ever tried to measure the length of a pole while walling on a road or while walking have you tried to take a shortout io cut the distance short.
In this video we will learn about Pythagoras theorem.

| Pre-App <br> Discussion | Teacher tells students about who discovered Pythagoras theorem, <br> Teacher shows various images of use of Pythagoras theorem |
| :--- | :--- |
|  | Teacher asks students about what is the use of Pythagoras theorem in real |


| Extension <br> Activities | Teacher will take the students in playground and will divide students in two <br> groups and teacher will instruct them <br> 1. First group students will walk in L pattern to cover a certain distance <br> 2.Second group will cover the same distance diagonally. <br> Teacher will ask students that which group covered the end point in less time |
| :--- | :--- |
| Assessment | 1. Sostudents tell me the statement for Pythagoras theorem? <br> 2. What is the formula for Pythagoras theorem? |
| Closure | 3. Pythagoras theorem is applicable to triangles or rectangles? <br> Sostudents in this video we learned about Pythagoras theorem and <br> solved <br> problems based on the theroem |

Signature of Guide


