RATIONALISED CBE LESSON PLANS

GRADE : 8

TERM : THREE

YEAR :2025

LEARNING AREA: MATHEMATICS

TEACHERS NAME……

SCHOOL:……

WEEK 1: LESSON 1

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Geometry

Sub Strand: Scale drawing

Specific Learning Outcomes:
- By the end of the lesson, the learner should be able to:

1.Represent length to a given scale in different situations 2.Convert actual length to scale length
3.Appreciate the use of scale drawing in maps

Key Inquiry Question(s):
- How can we measure and represent length of different objects in our immediate environment?
- How do we discuss and represent length using a given scale in various scenarios?

Core competencies	Values	PCIs
Communication and Collaboration **Imagination and Creativity** **Critical thinking and Problem solving** **Digital literacy**	**Respect** **Responsibility** **Citizenship**	**Citizenship** **Environmental education** **ESD** **Self- esteem** **Self- awareness**

Learning Resources:
- KLB Top scholar Mathematics Grade 8 pages 143-145

Organisation of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the

learning resources, emphasizing the understanding of the key concepts.

Lesson Development (30 minutes):
Based on learning experience: How do we determine scale in real life?

Lesson development MUST be split into 3 or 4 distinct steps:

Step 1:
- Introduce the concept of scale drawing and its importance.
- Explain how to represent length to a given scale.
- Demonstrate different situations where scale drawing is used, such as maps and blueprints.

Step 2:
- Discuss how to convert actual length to scale length using examples.
- Engage students in calculating scale lengths for various objects.

Step 3:
- Explore practical applications of scale drawing in measuring distances on maps.
- Guide students in understanding the relationship between actual measurements and scale measurements.

Step 4:
- Allow students to practice creating scale drawings of simple objects or maps.
- Provide feedback and guidance as they work on their scale drawings.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics, such as a quiz or group discussion.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- For extended activities, students can work on creating their own scale drawings of their bedroom layout or a familiar area in their neighborhood.
- Students can also research and present on the history and significance of cartography and map-making.

Teacher Self-Evaluation:

WEEK 1: LESSON 2

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Geometry

Sub Strand: Scale drawing

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1.Represent length to a given scale in different situations. 2.Convert actual length to scale length.
3.Appreciate the use of scale drawing in maps.

Key Inquiry Question(s):
- Measure and represent length of different objects from immediate environment in his/her book.
- Discuss and represent length of a given scale in different situations.

Core competencies	Values	PCIs
Communication and Collaboration **Imagination and Creativity** **Critical thinking and Problem solving** **Digital literacy**	**Respect** **Responsibility** **Citizenship**	**Citizenship** **Environmental education** **ESD** **Self- esteem** **Self- awareness**

Learning Resources:
- KLB Top scholar Mathematics Grade 8 pages 143-145

Organisation of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of the key concepts.

Lesson Development (30 minutes):

Based on learning experience: How do we determine scale in real life?

Step 1: Introduce the concept of scale drawing and its importance in various fields such as cartography and architecture.

Step 2: Demonstrate how to represent length to a given scale using practical examples.

Step 3: Discuss and practice converting actual lengths to scale lengths in different scenarios.

Step 4: Engage students in a hands-on activity where they create their own scale drawings based on real-life objects.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Assign students to create scale drawings of their bedrooms or neighborhoods.
- Have students research and analyze the use of scale drawings in famous architectural designs or city planning projects.
- Conduct a group activity where students work together to create a scale map of their school campus.

Teacher Self-Evaluation:

WEEK 1: LESSON 3

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Geometry

Sub Strand: Scale drawing

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1. Convert scale length to actual length
2. Interpret linear scales in statement form in different questions 3. Appreciate the use of scale drawing in maps

Key Inquiry Question(s):
- Discuss and practice converting scale from one to another
- Read, discuss and interpret given linear scales in statement form
- Discuss and write given linear scales in statement form

Core competencies	Values	PCIs
Communication and Collaboration **Imagination and Creativity** **Critical thinking and Problem solving** **Digital literacy**	**Respect** **Responsibility** **Citizenship**	**Citizenship** **Environmental education** **ESD** **Self- esteem** **Self- awareness**

Learning Resources:
- KLB Top scholar Mathematics Grade 8 page 146-149

Organisation of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of the key concepts.

Lesson Development (30 minutes):

- Based on learning experience: Where do we use scale drawing in real-life situations?

- Lesson development MUST be split into 3 or 4 distinct steps. The content should be below the steps:

Step 1: Discuss and practice converting different scales from one to another.

Step 2: Read, discuss, and interpret given linear scales in statement form.

Step 3: Write out given linear scales in statement form.

Step 4: Explore and discuss the application of scale drawing in maps.

Conclusion (5 minutes)
- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Collaborative group activity: Create a scale drawing of a famous landmark and calculate the actual dimensions.
- Real-life application: Have students find examples of scale drawings in everyday life and discuss their significance.

Teacher Self-Evaluation:

WEEK 1: LESSON 4

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Geometry

Sub Strand: Scale Drawing

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1.Convert scale length to actual length
2. Interpret linear scales in statement form in different questions
3.Appreciate the use of scale drawing in maps

Key Inquiry Question(s):
- Discuss and practice converting scale from one to another
- Read, discuss, and interpret given linear scales in statement form
- Discuss and write given linear scales in statement form

Core competencies	Values	PCIs
Communication and Collaboration **Imagination and Creativity** **Critical thinking and Problem solving** **Digital literacy**	**Respect** **Responsibility** **Citizenship**	**Citizenship** **Environmental education** **ESD** **Self- esteem** **Self- awareness**

Learning Resources:
- KLB Top scholar Mathematics Grade 8 page 146-149

Organization of Learning:

Introduction (5 minutes):
1. Review the previous lesson.

2. Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of the key concepts.

Lesson Development (30 minutes):
Based on learning experience: Where do we use scale drawing in real-life situations?

The lesson development must be split into 3 or 4 distinct steps.

Step 1: Discuss the concept of scale drawing and its practical applications.
Step 2: Practice converting scale length to actual length using examples.
Step 3: Interpret and analyze linear scales provided in statement form.
Step 4: Engage in a group discussion and write down linear scales in statement form.

Conclusion (5 minutes):

1. Summarize key points and learning objectives achieved during the lesson.
2. Conduct a brief interactive activity to reinforce the main topics.
3. Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Create a scale drawing of a familiar place (e.g., school, neighborhood) and calculate the actual distances.
- Design a map of a fictional town using scales and measurements discussed in the lesson.

Teacher Self-Evaluation:

WEEK 1: LESSON 5

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Geometry

Sub Strand: Scale drawing

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1. Write linear scale in statement form in different situations 2. Interpret linear scales in ratio form in different situations
3. Appreciate the use of scale drawing in maps

Key Inquiry Question(s):
- How do we write linear scale in statement form?
- How do we read, discuss, and interpret given linear scales in ratio form?

Core competencies	Values	PCIs
Communication and Collaboration **Imagination and Creativity** **Critical thinking and Problem solving** **Digital literacy**	**Respect** **Responsibility** **Citizenship**	**Citizenship** **Environmental education** **ESD** **Self- esteem** **Self- awareness**

Learning Resources:
- KLB Top Scholar Mathematics Grade 8 pages 149-151

Organisation of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of the key concepts.

Lesson Development (30 minutes):

Based on learning experience: How do we interpret linear scales in ratio form?

Step 1:

Explain the concept of linear scale and its importance in scale drawing.

Step 2:

Demonstrate how to write linear scale in statement form with examples from real-world situations.

Step 3:

Engage students in interpreting linear scales in ratio form through practice exercises and scenarios.

Step 4:

Discuss the significance of scale drawing in maps and its practical applications.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Have students create their own scale drawing of a familiar area, such as their classroom, using appropriate linear scales.
- Ask students to research and present examples of scale drawings used in architecture or engineering projects.

Teacher Self-Evaluation:

WEEK 2: LESSON 1

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Geometry

Sub Strand: Scale drawing

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1. Write linear scale in statement form in different situations 2. Interpret linear scales in ratio form in different situations
3. Appreciate the use of scale drawing in maps

Key Inquiry Question(s):
- How do we write linear scales in statement form?
- How do we interpret given linear scales in ratio form?

Core competencies	Values	PCIs
Communication and Collaboration **Imagination and Creativity** **Critical thinking and Problem solving** **Digital literacy**	**Respect** **Responsibility** **Citizenship**	**Citizenship** **Environmental education** **ESD** **Self- esteem** **Self- awareness**

Learning Resources:
- KLB Top Scholar Mathematics Grade 8, pages 149-151

Organisation of Learning:

Introduction (5 minutes):
- Review the previous lesson on scale drawing.
- Guide learners to read and discuss relevant content from the learning resources, focusing on understanding key concepts.

Lesson Development (30 minutes):

Step 1: Understanding Linear Scales
- Introduce the concept of linear scales and discuss their importance in maps and drawings.
- Provide examples and guide students in writing linear scales in statement form.

Step 2: Interpreting Linear Scales in Ratio Form
- Explain how to interpret linear scales in ratio form.
- Engage students in activities where they calculate distances using ratio scales.

Step 3: Practical Application of Linear Scales
- Present real-world examples where scale drawings are used, such as floor plans or routes on a map.
- Ask students to create their own scale drawings and interpret them using ratios.

Conclusion (5 minutes):

- Summarize key points about linear scales and their interpretation.
- Conduct a brief interactive activity to reinforce learning, such as a quiz or problem- solving exercise.
- Preview upcoming topics or questions to consider in the next session.

Extended Activities:

- Assign students the task of creating a scale drawing of their classroom or school compound.
- Have students compare and discuss different map scales used in navigation apps or atlases.

Teacher Self-Evaluation:

WEEK 2: LESSON 2

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Geometry

Sub Strand: Scale drawing

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1. Convert linear scale from statement form to ratio form and ratio form to statement form
2. Make scale drawings in different situations
3. Apply scale drawing in real-life situations
4. Use digital devices to learn more about scale drawing
5. Appreciate the use of scale drawing in maps

Key Inquiry Question(s):
- Discuss and carry out conversions of scales from one form to another
- Make scale drawings on different learning materials using appropriate scale
- Use digital devices to enhance learning about scale drawing
- Demonstrate the use of scale in maps

Core competencies	Values	PCIs
Communication and Collaboration **Imagination and Creativity** **Critical thinking and Problem solving** **Digital literacy**	**Respect** **Responsibility** **Citizenship**	**Citizenship** **Environmental education** **ESD** **Self- esteem** **Self- awareness**

Learning Resources:
- KLB Top scholar Mathematics Grade 8 pages 152-155
- Maps
- Digital devices

Organization of Learning:

Introduction (5 minutes):

- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing understanding of key concepts.

Lesson Development (30 minutes):

- Based on learning experience: How do we convert linear scale from statement form to ratio form?

Step 1: Introduce the concept of linear scale and explain the difference between statement and ratio forms.

Step 2: Demonstrate how to convert linear scale from statement form to ratio form.

Step 3: Provide practice problems for students to convert linear scales from ratio form

to statement form.

Step 4: Discuss real-life examples where understanding scale is crucial, such as in map reading.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Encourage students to create their own scale drawings of familiar objects.
- Have students research how scale drawing is used in various professions, such as architecture or engineering, and present their findings to the class.

Teacher Self-Evaluation:

WEEK 2: LESSON 3

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Geometry

Sub Strand: Scale Drawing

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1.Convert linear scale from statement form to ratio form and ratio form to statement form
2.Make scale drawings in different situations
3.Apply scale drawing in a real-life situation
4. Use digital devices to learn more about scale drawing
5.Appreciate the use of scale drawing in maps

Key Inquiry Question(s):
- Discuss and carry out conversions of scales from one form to another
- Make scale drawings on different learning materials using appropriate scale
- Use digital devices to enhance understanding of scale drawing
- Demonstrate the application of scale in maps

Core competencies	Values	PCIs
Communication and Collaboration **Imagination and Creativity** **Critical thinking and Problem solving** **Digital literacy**	**Respect** **Responsibility** **Citizenship**	**Citizenship** **Environmental education** **ESD** **Self- esteem** **Self- awareness**

Learning Resources:
- KLB Top Scholar Mathematics Grade 8, pages 152-155
- Maps
- Digital devices

Organization of Learning:

Introduction (5 minutes):

- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing understanding the key concepts.

Lesson Development (30 minutes):

Step 1: Converting linear scale from statement form to ratio form:
- Explain the concept of linear scale and its importance in scale drawing.
- Provide examples and guide students in converting linear scale from statement form to ratio form.

Step 2: Converting ratio form to statement form:
- Demonstrate how to convert ratio form back to statement form in order to create accurate scale drawings.
- Practice exercises to reinforce understanding.

Step 3: Applying scale drawing in real-life situations:
- Discuss various real-life scenarios where scale drawing is used, such as building plans and maps.
- Challenge students to create their own scale drawings based on given scenarios.

Step 4: Utilizing digital devices for learning scale drawing:
- Introduce students to digital tools that can aid in creating and understanding scale drawings.
- Encourage students to explore these resources and share their findings.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics, such as a quiz or group discussion.
- Preview upcoming topics or questions to consider for the next session.

Extended Activities:

- Assign students to create a scale drawing of their classroom or school layout, emphasizing accuracy and scale conversion.
- Explore online map resources and analyze how scale is used to represent distances.
- Have students research historical maps and analyze the scale used in each.

Teacher Self-Evaluation:

WEEK 2: LESSON 4

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Geometry

Sub Strand: Common solids

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1. Identify common solids from the environment.
2. Sketch nets of cubes, cuboids, cylinders, pyramids, and cones. 3. Appreciate the use of common solids in real life.

Key Inquiry Question(s):
- Collect common solids such as cubes, cuboids, cylinders, pyramids, and cones from the immediate environment.
- Discuss, open, and sketch nets of hollow solids.

Core competencies	Values	PCIs
Communication and Collaboration **Imagination and Creativity** **Critical thinking and Problem solving** **Digital literacy**	**Respect** **Responsibility** **Citizenship**	**Citizenship** **Environmental education** **ESD** **Self- esteem** **Self- awareness**

Learning Resources:
- KLB Top Scholar Mathematics Grade 8 pages 158-165

Organization of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of the key concepts.

Lesson Development (30 minutes):

Step 1: Introduction to Common Solids
- Define common solids (cubes, cuboids, cylinders, pyramids, and cones).
- Show examples of each solid type.

Step 2: Identifying Common Solids
- Discuss how to identify common solids in real-life objects.
- Engage students in a hands-on activity to recognize various common solids.

Step 3: Sketching Nets of Common Solids
- Explain what nets are and how they represent 3D objects in 2D.
- Guide students in sketching nets of cubes, cuboids, cylinders, pyramids, and cones.

Step 4: Real-life Applications of Common Solids
- Discuss how common solids are used in everyday life.
- Brainstorm examples of objects that are based on common solid shapes.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Have students search for common solids in their surroundings and create a collage or presentation showcasing their findings.
- Challenge students to design and construct a 3D model using common solid shapes discussed in the lesson.

Teacher Self-Evaluation:

WEEK 2: LESSON 5

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Geometry

Sub Strand: Common solids

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1.Identify common solids from the environment
2. Sketch nets of cubes, cuboids, cylinders, pyramids, and cones 3. Appreciate the use of common solids in real life

Key Inquiry Question(s):
- Collect common solids such as cubes, cuboids, cylinders, pyramids, and cones from the immediate environment
- Discuss, open and sketch nets of hollow solids

Core competencies	Values	PCIs
Communication and Collaboration **Imagination and Creativity** **Critical thinking and Problem solving** **Digital literacy**	**Respect** **Responsibility** **Citizenship**	**Citizenship** **Environmental education** **ESD** **Self- esteem** **Self- awareness**

Learning Resources:
- KLB Top Scholar Mathematics Grade 8, pages 158-165

Organisation of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of key concepts.

Lesson Development (30 minutes):
- Based on learning experience: What are common solids?

- Lesson development MUST be split into 3 or 4 distinct steps.

Step 1: Identifying Common Solids
- Define common solids such as cubes, cuboids, cylinders, pyramids, and cones.
- Show examples from the environment.

Step 2: Sketching Nets of Common Solids
- Introduce the concept of nets and how they relate to the 3D shapes.
- Demonstrate how to sketch nets of cubes, cuboids, cylinders, pyramids, and cones.

Step 3: Real-life Applications of Common Solids
- Discuss and brainstorm the practical uses of common solids in everyday life.
- Connect the shapes to real-world objects and structures.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Encourage students to find more examples of common solids in their surroundings and sketch nets of them.
- Create a project where students design a 3D model using common solids and present its real-life application.

Teacher Self-Evaluation:

WEEK 3: LESSON 1

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Geometry

Sub Strand: Common solids

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1.Identify common solids from the environment
2. Sketch nets of cubes, cuboids, cylinders, pyramids, and cones 3. Appreciate the use of common solids in real life

Key Inquiry Question(s):
- Collect common solids such as cubes, cuboids, cylinders, pyramids, and cones from the immediate environment
- Discuss, open, and sketch nets of hollow solids

Core competencies	Values	PCIs
Communication and Collaboration **Imagination and Creativity** **Critical thinking and Problem solving** **Digital literacy**	**Respect** **Responsibility** **Citizenship**	**Citizenship** **Environmental education** **ESD** **Self- esteem** **Self- awareness**

Learning Resources:
- KLB Top scholar Mathematics Grade 8 page 158-165

Organization of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of the key concepts.

Lesson Development (30 minutes):

- Based on learning experience: What are common solids?
- Lesson development MUST be split into 3 or 4 distinct steps:

Step 1: Introduction to common solids - discuss the characteristics and examples of cubes, cuboids, cylinders, pyramids, and cones.

Step 2: Sketching nets - demonstrate how to draw nets of common solids on the board.

Step 3: Real-life applications - discuss how common solids are used in everyday life.

Step 4: Interactive activity - engage students in creating their own nets of common solids.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Create a project where students have to find real-life examples of common solids and present their findings with sketches and explanations.
- Explore 3D modeling software or apps to virtually create and manipulate common solids.

Teacher Self-Evaluation:

WEEK 3: LESSON 2

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Geometry

Sub Strand: Common Solids

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1. Work out surface area of solids from nets of solids in different situations 2.Determine the distance between two points on the surface of solid in different situations
3.Appreciate use of common solids in real life

Key Inquiry Question(s):
- Work out the surface area of solids from nets
- Discuss and practice measuring the distance between any two points on the surface of solids

Core competencies	Values	PCIs
Communication and Collaboration **Imagination and Creativity** **Critical thinking and Problem solving** **Digital literacy**	**Respect** **Responsibility** **Citizenship**	**Citizenship** **Environmental education** **ESD** **Self- esteem** **Self- awareness**

Learning Resources:
- KLB Top scholar Mathematics Grade 8 pages 166-174

Organisation of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of the key concepts.

Lesson Development (30 minutes):
- Based on learning experience: How do we determine surface areas of solids?

Step 1: Introduce the concept of nets and how they relate to the surface area of solids.

Step 2: Demonstrate how to calculate the surface area of a given solid using its net.

Step 3: Practice calculating the surface area of different solids from their nets.

Step 4: Discuss and practice measuring the distance between two points on the surface of solids.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Have students create their own nets for various common solids and calculate the surface area.
- Challenge students to find real-life examples where understanding surface area and distance between points on solids is important, and present their findings in class.

Teacher Self-Evaluation:

WEEK 3: LESSON 3

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Geometry

Sub Strand: Common Solids

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1.Work out surface area of solids from nets of solids in different situations 2.Determine the distance between two points on the surface of solid in different situations
3. Appreciate the use of common solids in real life

Key Inquiry Question(s):
- How do we work out the surface area of solids from nets?
- How can we measure the distance between any two points on the surface of solids?

Core competencies	Values	PCIs
Communication and Collaboration **Imagination and Creativity** **Critical thinking and Problem solving** **Digital literacy**	**Respect** **Responsibility** **Citizenship**	**Citizenship** **Environmental education** **ESD** **Self- esteem** **Self- awareness**

Learning Resources:
- KLB Top scholar Mathematics Grade 8 pages 166-174

Organization of Learning:

Introduction (5 minutes):
- Review the previous lesson on geometry concepts.
- Engage learners in reading and discussing relevant content from the learning resources to reinforce key concepts.

Lesson Development (30 minutes):
Step 1: Introduce the concept of determining surface areas of solids using nets.

Step 2: Demonstrate how to calculate the surface area of different solids.

Step 3: Discuss and practice measuring the distance between two points on the surface of solids.

Step 4: Explore real-life applications of common solids and their importance.

Conclusion (5 minutes):

- Summarize key learning points on surface areas and distances in solids.
- Engage learners in a brief interactive activity to reinforce the main topics.
- Provide a preview of upcoming topics and questions to ponder for the next session.

Extended Activities:

- Encourage students to create their own nets for different solids and calculate their surface areas.
- Have students research and present on how common solids are used in various industries or fields.

Teacher Self-Evaluation:

WEEK 3: LESSON 4

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Geometry

Sub Strand: Common solids

Specific Learning Outcomes:
1. Work out surface area of solids from nets of solids in different situations
2. Determine the distance between two points on the surface of solid in different situations
3. Appreciate use of common solids in real life

Key Inquiry Question(s):
- Work out the surface area of solids from nets
- Discuss and practice measuring the distance between any two points on the surface of solids

Core competencies	Values	PCIs
Communication and Collaboration **Imagination and Creativity** **Critical thinking and Problem solving** **Digital literacy**	**Respect** **Responsibility** **Citizenship**	**Citizenship** **Environmental education** **ESD** **Self- esteem** **Self- awareness**

Learning Resources:
- KLB Top scholar Mathematics Grade 8 page 166-174

Organisation of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of the key concepts.

Lesson Development (30 minutes):

Step 1: Introduction to Surface Area of Solids

- Explain the concept of surface area and discuss why it is important in real life.
- Show examples of different nets of solids and discuss how to calculate the surface area from them.

Step 2: Calculating Surface Area from Nets
- Demonstrate how to work out the surface area of solids from nets using specific examples.
- Engage students in solving practice problems to reinforce understanding.

Step 3: Distance Between Two Points on Solids
- Explain how to determine the distance between two points on the surface of solids.
- Provide examples and guide students through calculating distances in different scenarios.

Step 4: Real-Life Applications of Common Solids
- Discuss how common solids are used in real life situations.
- Encourage students to identify and discuss examples of common solids they encounter in their daily lives.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Create a hands-on activity where students construct nets of different solids and calculate their surface areas.
- Challenge students to find real-life objects that can be represented by common solids and calculate their surface areas or distances between points.

Teacher Self-Evaluation:

WEEK 3: LESSON 5

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Geometry

Sub Strand: Common solids

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1.Make models of hollow and compact solids for skills development. 2.Use IT devices to draw models and nets of solids.
3.Appreciate the use of common solids in real life.

Key Inquiry Question(s):
- How can we make models of hollow and compact solids using locally available materials?
- How can we use digital devices to watch videos on common solids, nets, and draw the solids and nets?
- How can we use other resources such as print to draw or trace nets of solids?

Core competencies	Values	PCIs
Communication and Collaboration **Imagination and Creativity** **Critical thinking and Problem solving** **Digital literacy**	**Respect** **Responsibility** **Citizenship**	**Citizenship** **Environmental education** **ESD** **Self- esteem** **Self- awareness**

Learning Resources:
- KLB Top scholar Mathematics Grade 8 page 175-178

Organization of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of the key concepts.

Lesson Development (30 minutes):
Based on learning experience: How do you determine the volume of common solids? Lesson development MUST be split into 3 or 4 distinct steps.

Step 1: Introduce the concept of volume and explain how it is calculated for common solids.

Step 2: Demonstrate how to determine the volume of a cube and a rectangular prism. **Step 3:** Provide examples and practice exercises for students to calculate the volume of different common solids such as cylinders and cones.

Step 4: Discuss real-life applications of understanding the volume of common solids.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Have students create their models of common solids using various materials.
- Assign a project where students research and present on the practical applications of common solids in different industries.

Teacher Self-Evaluation:

WEEK 4: LESSON 1

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Geometry

Sub Strand: Common solids

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1.Make models of hollow and compact solids for skills development. 2.Use IT devices to draw models and nets of solids.
3.Appreciate the use of common solids in real life.

Key Inquiry Question(s):
- How can we make models of hollow and compact solids using locally available materials?
- How can digital devices help us understand common solids and draw their models and nets?
- How can other resources such as print be used to draw or trace nets of solids?

Core competencies	Values	PCIs
Communication and Collaboration **Imagination and Creativity** **Critical thinking and Problem solving** **Digital literacy**	**Respect** **Responsibility** **Citizenship**	**Citizenship** **Environmental education** **ESD** **Self- esteem** **Self- awareness**

Learning Resources:
- KLB Top Scholar Mathematics Grade 8, pages 175-178

Organization of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of key concepts.

Lesson Development (30 minutes):
Based on learning experience: How do you determine the volume of common solids?

Step 1: Introduce different types of common solids and provide examples.

Step 2: Explain how to calculate the volume of common solids such as cubes, rectangular prisms, and cylinders.

Step 3: Discuss how to make models of hollow and compact solids using locally available materials.

Step 4: Use digital devices to watch videos on common solids, nets, and practice drawing the solids and nets.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Encourage students to create their own models of common solids using different materials.
- Provide additional worksheets to practice calculating volumes of various common solids.

Teacher Self-Evaluation:

WEEK 4: LESSON 2

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Subject: Geometry

Sub Strand: Common Solids

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1. Make models of hollow and compact solids for skills development 2. Use IT devices to draw models and nets of solids
3. Appreciate the use of common solids in real life

Key Inquiry Question(s):
- How can we make models of hollow and compact solids using locally available materials?
- How can digital devices help us in understanding common solids and nets?
- What other resources can we use to draw or trace nets of solids?

Core competencies	Values	PCIs
Communication and Collaboration **Imagination and Creativity** **Critical thinking and Problem solving** **Digital literacy**	**Respect** **Responsibility** **Citizenship**	**Citizenship** **Environmental education** **ESD** **Self- esteem** **Self- awareness**

Learning Resources:
- KLB Top Scholar Mathematics Grade 8 pages 175-178

Organization of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of key concepts.

Lesson Development (30 minutes):

- Based on the learning experience: How do you determine the volume of common solids?

Step 1: Discuss the concept of volume and introduce the formula for finding the volume of common solids.

Step 2: Demonstrate how to calculate the volume of simple geometric shapes such as cubes and rectangular prisms.

Step 3: Provide examples for students to practice calculating the volume of different common solids like cylinders and cones.

Step 4: Challenge students with real-life word problems involving the volume of common solids.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics, such as a volume calculation game.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Have students create their own composite shapes using nets and calculate their volumes.
- Research and present on the applications of common solids in various industries or everyday life.

Teacher Self-Evaluation:

WEEK 4: LESSON 3

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Geometry

Sub Strand: Common Solids

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1. Make models of hollow and compact solids for skills development. 2.Use IT devices to draw models and nets of solids.
3. Appreciate the use of common solids in real life.

Key Inquiry Question(s):
- How can we make models of hollow and compact solids using locally available materials?
- How can digital devices help us learn about common solids and draw their nets?
- What resources can we use, such as print, to draw or trace nets of solids?

Core competencies	Values	PCIs
Communication and Collaboration **Imagination and Creativity** **Critical thinking and Problem solving** **Digital literacy**	**Respect** **Responsibility** **Citizenship**	**Citizenship** **Environmental education** **ESD** **Self- esteem** **Self- awareness**

Learning Resources:
- KLB Top Scholar Mathematics Grade 8 pages 175-178.

Organization of Learning:

Introduction (5 minutes):

- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, focusing on understanding key concepts.

Lesson Development (30 minutes):
Based on learning experience: How do you determine the volume of common solids?

Step 1: Introduce the concept of volume and its importance in understanding common solids.

Step 2: Discuss how to calculate the volume of basic common solids such as cubes, rectangular prisms, and cylinders.

Step 3: Demonstrate how to calculate the volume of more complex common solids, such as cones and spheres.

Step 4: Engage students in hands-on activities where they can apply their knowledge to calculate the volumes of various common solids.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics.
- Provide a preview of upcoming topics or questions to consider for the next session.

Extended Activities:

- Encourage students to create their own models of common solids using materials available at home.
- Challenge students to find real-life examples where common solids are used and calculate their volumes.
- Have students research and present on the applications of common solids in different fields such as architecture, engineering, or design.

Teacher Self-Evaluation:

WEEK 4: LESSON 4

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Data Handling and Probability

Sub Strand: Data Presentation and Interpretation

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1.Draw bar graphs of data from real-life situations.
2. Interpret bars of data from real-life situations.
3. Desire to use data in representation and interpretation in real-life situations.

Key Inquiry Question(s):
- Collect data from the immediate environment or experiences, for example, size of shoes, height, or test scores.
- Use a suitable scale to represent the data in bar graphs.

Core competencies	Values	PCIs
Communication and Collaboration **Critical thinking and Problem solving** **Digital literacy** **Self- efficacy**	**Social cohesion** **Responsibility**	**Environmental awareness** **Self- awareness**

Learning Resources:
- KLB Top Scholar Mathematics Grade 8, pages 178-183

Organization of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of the key concepts.

Lesson Development (30 minutes):
- Based on learning experience: What are the different ways of representing data? Lesson development MUST be split into 3 or 4 distinct steps:

Step 1: Introduce the concept of bar graphs and discuss their importance in representing data visually.

Step 2: Provide examples of real-life scenarios where bar graphs can be used to show data.

Step 3: Demonstrate how to create a bar graph using data collected from the immediate environment or experiences.

Step 4: Guide students in interpreting the bars of data on the created graph and drawing conclusions based on the information presented.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Have students collect data from their immediate environment or experiences and create their bar graphs to share with the class.
- Encourage students to conduct surveys or collect data on a topic of their choice, and represent the information using bar graphs.

Teacher Self-Evaluation:

WEEK 4: LESSON 5

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Data Handling and Probability

Sub Strand: Data presentation and interpretation

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1. Draw bar graphs of data from real-life situations.
2. Interpret bar graphs of data from real-life situations.
3. Desire to use data in representation and interpretation in real-life situations.

Key Inquiry Question(s):
- Collect data from the immediate environment or experiences (e.g., size of shoes, height, or test scores).
- Use a suitable scale to represent the data in bar graphs.

Core competencies	Values	PCIs
Communication and Collaboration **Critical thinking and Problem solving** **Digital literacy** **Self- efficacy**	**Social cohesion** **Responsibility**	**Environmental awareness** **Self- awareness**

Learning Resources:
- KLB Top Scholar Mathematics Grade 8 pages 178-183

Organisation of learning:

Introduction (5 minutes):
- Review the previous lesson on data handling and probability.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of key concepts.

Lesson Development (30 minutes):

Step 1: Introduction to Bar Graphs
- Define a bar graph and discuss its purpose in representing data visually.

- Provide examples of real-life situations where bar graphs can be used.

Step 2: Creating Bar Graphs
- Discuss the steps involved in creating a bar graph, including labeling axes, choosing a scale, and plotting data accurately.
- Guide students through creating a simple bar graph using given data.

Step 3: Interpreting Bar Graphs
- Teach students how to interpret a bar graph by analyzing the data represented.
- Engage students in activities where they interpret bar graphs and extract information from them.

Step 4: Application of Bar Graphs
- Provide real-life scenarios or problems where students have to create and interpret bar graphs independently.
- Encourage students to think critically about the data presented and draw conclusions.

Conclusion (5 minutes):

- Summarize the key points learned during the lesson about bar graphs and data interpretation.
- Conduct a brief interactive activity, such as a quiz or group discussion, to reinforce the main topics covered.
- Preview upcoming topics or questions for students to consider in the next session.

Extended Activities:

- Assign students the task of collecting data from their immediate environment and creating their own bar graphs to present in the next class.
- Challenge students to find examples of bar graphs in newspapers, magazines, or online sources and analyze them for interpretation.

Teacher Self-Evaluation:

WEEK 5: LESSON 1

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Data Handling and Probability

Sub Strand: Data presentation and interpretation

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1. Draw line graphs of given data from real-life situations.
2. Interpret line graphs of data from real-life situations.
3. Apply data representation and interpretation in real life situations.

Key Inquiry Question(s):
- Discuss and represent data in line graphs.
- Interpret line graphs of given data.

Core competencies	Values	PCIs
Communication and Collaboration **Critical thinking and Problem solving** **Digital literacy** **Self- efficacy**	**Social cohesion** **Responsibility**	**Environmental awareness** **Self- awareness**

Learning Resources:
- KLB Top scholar Mathematics Grade 8 pages 184-187.

Organisation of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of key concepts.

Lesson Development (30 minutes):
- Based on learning experience: How do we draw line graphs to represent data?

Step 1: Introduce the concept of line graphs and their importance in representing data visually.

Step 2: Demonstrate how to plot data points and connect them to create a line graph.

Step 3: Provide examples of real-life data sets and guide students in creating line graphs based on the given data.

Step 4: Discuss the importance of interpreting line graphs to make meaningful conclusions about the data.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Suggest students create their own line graphs using data from their daily lives.
- Challenge students to interpret and analyze line graphs from newspapers or websites to enhance data interpretation skills.

Teacher Self-Evaluation:

WEEK 5: LESSON 2

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Data Handling and Probability

Sub Strand: Data presentation and interpretation

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1. Draw line graphs of given data from real-life situations.
2. Interpret line graphs of data from real-life situations.
3.Desire to use data in representation and interpretation in real-life situations.

Key Inquiry Question(s):
- Discuss and represent data in line graphs.
- Discuss and interpret line graphs of given data.

Core competencies	Values	PCIs
Communication and Collaboration **Critical thinking and Problem solving** **Digital literacy** **Self- efficacy**	**Social cohesion** **Responsibility**	**Environmental awareness** **Self- awareness**

Learning Resources:
- KLB Top Scholar Mathematics Grade 8 pages 184-187

Organisation of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of the key concepts.

Lesson Development (30 minutes):
- Based on learning experience: How do we draw line graphs to represent data?

Step 1: Introduce the concept of line graphs and the importance of representing data visually.

Step 2: Demonstrate how to plot points on a coordinate plane to draw a line graph.

Step 3: Practice drawing line graphs using real-life data sets provided by the teacher.

Step 4: Interpret the line graphs drawn and discuss the trends and patterns observed.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Ask students to collect their own data and create line graphs to present their findings.
- Encourage students to find real-life examples of line graphs in newspapers or online and discuss their interpretations.

Teacher Self-Evaluation:

WEEK 5: LESSON 3

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Data Handling and Probability

Sub Strand: Data presentation and interpretation

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1. Draw line graphs of given data.
2. Interpret line graphs of given data from real-life situations.
3. Utilize data in representation and interpretation in real-life situations.

Key Inquiry Question(s):
- How can we discuss and represent data in line graphs?
- How do we interpret line graphs of given data?

Core competencies	Values	PCIs
Communication and Collaboration **Critical thinking and Problem solving** **Digital literacy** **Self- efficacy**	**Social cohesion** **Responsibility**	**Environmental awareness** **Self- awareness**

Learning Resources:
- KLB Top scholar Mathematics Grade 8 pages 184-187

Organisation of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of key concepts.

Lesson Development (30 minutes):
Based on learning experience: How do we draw line graphs to represent data?

Step 1: Introduce the concept of line graphs and their purpose in data representation.

Step 2: Demonstrate how to plot data points on a graph and connect them to form a line.

Step 3: Discuss the interpretation of line graphs in real-life scenarios.

Step 4: Provide practice problems for students to draw and interpret line graphs independently.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics, such as interpreting a given line graph.
- Provide a preview of upcoming topics or questions for the next session.

Extended Activities:

- Assign students a real-life data collection task to create their own line graphs.
- Challenge students to analyze and compare multiple line graphs to draw conclusions.
- Create a group activity where students create a line graph based on shared data and discuss their interpretations.

Teacher Self-Evaluation:

WEEK 5: LESSON 4

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Data Handling and Probability

Sub Strand: Data presentation and interpretation

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1. Draw line graphs of given data
2.Interpret line graphs of given data
3.Desire to use data in representation and interpretation in real-life situations

Key Inquiry Question(s):
- Discuss and represent data in line graphs
- Interpret line graphs of given data

Core competencies	Values	PCIs
Communication and Collaboration **Critical thinking and Problem solving** **Digital literacy** **Self- efficacy**	**Social cohesion** **Responsibility**	**Environmental awareness** **Self- awareness**

Learning Resources:
- KLB Top scholar Mathematics Grade 8 page 184-187

Organisation of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of the key concepts.

Lesson Development (30 minutes):
Based on learning experience: How do we interpret line graphs?, the lesson development must be split into 3 or 4

distinct steps.

Step 1: Introduction to Line Graphs
- Define what a line graph is.
- Discuss why line graphs are used to represent data.

Step 2: Drawing Line Graphs
- Provide examples of data sets.
- Demonstrate how to draw line graphs using the examples.

Step 3: Interpreting Line Graphs
- Explain how to read and interpret line graphs.
- Explore trends, patterns, and relationships in data represented by line graphs.

Step 4: Real-Life Applications
- Discuss real-life examples where line graphs are used.
- Encourage students to think about how they can apply line graph interpretation in their daily lives.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Engage students in creating their own line graphs using different data sets.
- Have students analyze and compare line graphs from different sources.
- Challenge students to find examples in the real world where line graphs are used and present their findings to the class.

Teacher Self-Evaluation:

WEEK 5: LESSON 5

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Data Handling and Probability

Sub Strand: Data presentation and interpretation

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1. Identify the mode of a set of discrete data
2.Calculate the mean of a set of discrete data
3.Utilize data in representation and interpretation in real-life situations

Key Inquiry Question(s):
- How do we identify the mode of a set of discrete data?
- How can we calculate the average from different sets of discrete data and relate it to mean?

Core competencies	Values	PCIs
Communication and Collaboration **Critical thinking and Problem solving** **Digital literacy** **Self- efficacy**	**Social cohesion** **Responsibility**	**Environmental awareness** **Self- awareness**

Learning Resources: -KLB Top Scholar Mathematics Grade 8, pages 191-193

Organization of Learning:

Introduction (5 minutes):
- Review the previous lesson on data presentation and interpretation.
- Guide learners to read and discuss relevant content from the learning resources, focusing on understanding key concepts.

Lesson Development (30 minutes):
- Based on learning experiences, explain how to calculate the mean of a given data. Break the lesson development into 4 steps:
Step 1: Define the terms "mean" and "mode" in relation to data sets.

Step 2: Demonstrate how to calculate the mean of a set of discrete data using examples.

Step 3: Discuss and practice identifying the mode of a set of discrete data with the students.

Step 4: Provide real-life scenarios where data representation and interpretation are important.

Conclusion (5 minutes):

- Summarize the key points covered during the lesson.
- Conduct a brief interactive activity to reinforce understanding of mean and mode.
- Preview upcoming topics or questions for the next session.

Extended Activities:

- Assign practice problems for students to calculate mean and identify mode from different data sets.
- Encourage students to collect data from their surroundings and analyze it to calculate mean and mode.

Teacher Self-Evaluation:

WEEK 6: LESSON 1

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Data Handling and Probability

Sub Strand: Data presentation and interpretation

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1.Determine the median of a set of discrete data
2.Use IT and other materials to determine the mean, mode, and median of discrete data 3. Apply data representation and interpretation in real-life situations

Key Inquiry Question(s):
- How to carry out different activities that involve finding the median position?
- How to utilize IT and other materials to determine the mean, mode, and median of discrete data?

Core competencies	Values	PCIs
Communication and Collaboration **Critical thinking and Problem solving** **Digital literacy** **Self- efficacy**	**Social cohesion** **Responsibility**	**Environmental awareness** **Self- awareness**

Learning Resources:
- KLB Top scholar Mathematics Grade 8 pages 194-196

Organisation of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing key concepts understanding.

Lesson Development (30 minutes):

Step 1: Introduce the concept of determining the median of data.

Step 2: Demonstrate how to find the median of a set of discrete data.

Step 3: Explain how to use IT and other materials to calculate the mean and mode of discrete data.

Step 4: Utilize IT and other materials to determine the mean, mode, and median of given data sets.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Group students and provide them with different sets of data to calculate mean, mode, and median using IT tools.
- Ask students to find real-life examples where data representation and interpretation are essential.
- Provide additional practice problems related to finding the mean, mode, and median of data sets.

Teacher Self-Evaluation:

WEEK 6: LESSON 2

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Data Handling and Probability

Sub Strand: Data presentation and interpretation

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1.Determine the median of a set of discrete data.
2.Use IT and other materials to determine the mean, mode, and median of discrete data.
3. Apply data representation and interpretation in real life situations.

Key Inquiry Question(s):
- How can we determine the median position in a set of data?
- How can we use technology and other resources to find the mean, mode, and median of discrete data?

Core competencies	Values	PCIs
Communication and Collaboration **Critical thinking and Problem solving** **Digital literacy** **Self- efficacy**	**Social cohesion** **Responsibility**	**Environmental awareness** **Self- awareness**

Learning Resources:
- KLB Top scholar Mathematics Grade 8, pages 194-196.

Organisation of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide students to read and discuss relevant content from the learning resources to understand key concepts.

Lesson Development (30 minutes):

Step 1: Define median and explain how to find it in a set of data.

Step 2: Introduce technology tools for calculating mean, mode, and median of discrete data.

Step 3: Work on practice problems together to apply the concepts learned.

Step 4: Discuss real-life examples where data interpretation is used.

Conclusion (5 minutes):

- Summarize key points and learning objectives.
- Conduct a brief interactive activity to reinforce concepts.
- Provide a preview of upcoming topics or questions for the next session.

Extended Activities:

- Assign practice problems involving finding the median of different data sets.
- Encourage students to collect their own data and calculate the mean, mode, and median using technology tools.
- Have students present their findings to the class in a mini-project format.

Teacher Self-Evaluation:

WEEK 6: LESSON 3

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Data Handling and Probability

Sub Strand: Data Presentation and Interpretation

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1. Identify the mode of a set of discrete data
2.Calculate the mean of a set of discrete data
3. Apply data representation and interpretation in real-life situations

Key Inquiry Questions:
- How can we identify the mode of a set of discrete data?
- How can we calculate the mean of different sets of discrete data and relate it to the average?

Core competencies	Values	PCIs
Communication and Collaboration **Critical thinking and Problem solving** **Digital literacy** **Self- efficacy**	**Social cohesion** **Responsibility**	**Environmental awareness** **Self- awareness**

Learning Resources:
- KLB Top Scholar Mathematics Grade 8 pages 191-193

Organisation of Learning:

Introduction (5 minutes):
- Review the previous lesson on data handling and probability.
- Guide learners to read and discuss relevant content from the learning resources to understand key concepts.

Lesson Development (30 minutes):
Based on learning experience: How do we get the mean of a given data?

Step 1: Introduce the concept of mode in data sets and explain how to identify it.

Step 2: Teach students how to calculate the mean of a set of discrete data using examples and practice exercises.

Step 3: Provide real-life examples where data representation and interpretation are essential for decision-making.

Step 4: Engage students in practical activities to reinforce understanding of mode and mean calculation.

Conclusion (5 minutes):

- Summarize key points about mode, mean, and data interpretation.
- Conduct a brief interactive activity to reinforce the main topics covered.
- Provide a preview of upcoming topics or questions for the next session.

Extended Activities:

- Encourage students to collect their own data sets and calculate the mode and mean.
- Ask students to create graphs or charts to visually represent the data they analyzed.

Teacher Self-Evaluation:

WEEK 6: LESSON 4

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Data Handling and Probability

Sub Strand: Probability

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1. Identify events involving chance in real-life situations.
2. Perform chance experiments in different situations.
3. Recognize events that happen by chance in real-life situations.

Key Inquiry Question(s):
- Discuss daily events that are likely or unlikely to happen.
- Discuss and carry out different chance experiments like flipping the coins, tossing the dice, or drawing colored balls from a bag one ball at a time.

Core competencies	Values	PCIs
Communication and Collaboration **Critical thinking and Problem solving** **Digital literacy** **Self- efficacy**	**Social cohesion** **Responsibility**	**Environmental awareness** **Self- awareness**

Learning Resources:
- KLB Top Scholar Mathematics Grade 8 pages 197-199

Organisation of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of key concepts.

Lesson Development (30 minutes):

Step 1: Discuss when we consider chances that an event is likely to happen.

Step 2: Introduce different methods of chance experiments such as flipping coins, tossing dice, and drawing colored balls from a bag.

Step 3: Perform a chance experiment, like tossing a fair coin, as a class to demonstrate probability.

Step 4: Engage students in discussions about real-life events and how probability plays a role in them.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Have students create their own chance experiments and share with the class.
- Develop word problems related to probability for students to solve individually or in groups.

Teacher Self-Evaluation:

WEEK 6: LESSON 5

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Data Handling and Probability

Sub Strand: Probability

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1.Identify events involving chance in real-life situations.
2.Perform chance experiments in different situations.
3. Recognize events that happen by chance in real-life situations.

Key Inquiry Question(s):
- Discuss daily events that are likely or unlikely to happen.
- Discuss and carry out different chance experiments like flipping coins, tossing dice, or drawing colored balls from a bag one at a time.

Core competencies	Values	PCIs
Communication and Collaboration **Critical thinking and Problem solving** **Digital literacy** **Self- efficacy**	**Social cohesion** **Responsibility**	**Environmental awareness** **Self- awareness**

Learning Resources:
- KLB Top Scholar Mathematics Grade 8, Pages 197-199

Organization of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of the key concepts.

Lesson Development (30 minutes):
Based on learning experience: When do we consider chances that an event is likely to happen?

Step 1: Introduce the concept of probability and likelihood of events.
Step 2: Discuss real-life examples of events with different probabilities.
Step 3: Perform chance experiments like flipping coins or rolling dice to demonstrate probability.
Step 4: Analyze and interpret the outcomes of the chance experiments.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Have students create their own probability experiments using everyday objects or situations.
- Explore online simulations or games related to probability to deepen understanding.

Teacher Self-Evaluation:

WEEK 7: LESSON 1

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Data Handling and Probability

Sub Strand: Probability

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1. Identify events involving chance in real-life situations.
2. Perform chance experiments in different situations.
3. Recognize events that happen by chance in real-life situations.

Key Inquiry Question(s):
- Discuss daily events that are likely or unlikely to happen.
- Discuss and carry out different chance experiments like flipping coins, tossing dice, or drawing colored balls from a bag one ball at a time.

Core competencies	Values	PCIs
Communication and Collaboration **Critical thinking and Problem solving** **Digital literacy** **Self- efficacy**	**Social cohesion** **Responsibility**	**Environmental awareness** **Self- awareness**

Learning Resources:
- KLB Top Scholar Mathematics Grade 8, pages 197-199.

Organization of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of key concepts.

Lesson Development (30 minutes):
- Based on learning experience: When do we consider the chances that an event is likely to happen?

Step 1: Introduce the concept of probability and discuss what makes an event likely or unlikely.

Step 2: Conduct a chance experiment with the learners, such as flipping a coin, to demonstrate probability in action.

Step 3: Analyze real-life scenarios and determine the likelihood of different events occurring.

Step 4: Practice drawing colored balls from a bag one at a time to understand probability further.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Have students create their own probability experiments using dice or cards.
- Analyze and discuss the probability of specific events happening in sports or games.

Teacher Self-Evaluation:

WEEK 7: LESSON 2

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Data Handling and Probability

Sub Strand: Probability

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1.Write experimental probability outcomes in different situations. 2.Express the probability outcomes in fractions in different situations. 3.Recognize events that happen by chance in real-life situations.

Key Inquiry Question(s):
- Discuss experimental probability outcomes in different situations.
- Record the probability of the chance outcomes as fractions.

Core competencies	Values	PCIs
Communication and Collaboration **Critical thinking and Problem solving** **Digital literacy** **Self- efficacy**	**Social cohesion** **Responsibility**	**Environmental awareness** **Self- awareness**

Learning Resources:
- KLB Top Scholar Mathematics Grade 8 pages 199-202

Organisation of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of key concepts.

Lesson Development (30 minutes):

Step 1: Why is probability important in real-life situations?

- Discuss real-life examples where probability is used (e.g., weather forecasts, sports outcomes).

Step 2: Experimental Probability Outcomes
- Introduce the concept of experimental probability and provide examples.

Step 3: Expressing Probabilities as Fractions
- Teach students how to express probability outcomes as fractions in different situations.

Step 4: Recognizing Chance Events
- Engage students in identifying events that occur by chance in everyday scenarios.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Have students conduct probability experiments using dice or cards and calculate the experimental probability.
- Ask students to create their own real-life scenarios and calculate the probability of outcomes.

Teacher Self-Evaluation:

WEEK 7: LESSON 3

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Data Handling and Probability

Sub Strand: Probability

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1.Write experimental probability outcomes in different situations. 2.Express the probability outcomes in fractions in different situations. 3,Recognize events that happen by chance in real life situations.

Key Inquiry Question(s):
- Discuss experimental probability outcomes in different situations.
- Record the probability of the chance outcomes of fractions.

Core competencies	Values	PCIs
Communication and Collaboration **Critical thinking and Problem solving** **Digital literacy** **Self- efficacy**	**Social cohesion** **Responsibility**	**Environmental awareness** **Self- awareness**

Learning Resources:
- KLB Top Scholar Mathematics Grade 8 pages 199-202

Organization of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of the key concepts.

Lesson Development (30 minutes)
- Based on learning experience: Why is probability important in real-life situations?

Step 1: Discuss the concept of probability and its relevance in everyday situations.

Step 2: Explore how to write experimental probability outcomes in different scenarios.

Step 3: Practice expressing probability outcomes in fractions in various situations.

Step 4: Identify and discuss real-life events that occur by chance.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Ask students to create their own probability scenarios and calculate the probabilities.
- Provide additional real-life examples where probability is used and have students analyze the likelihood of outcomes.

Teacher Self-Evaluation:

WEEK 7: LESSON 4

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Data Handling and Probability

Sub Strand: Probability

Specific Learning Outcomes:
-By the end of the lesson, learners should be able to:

1. Express the probability outcome in decimals or percentages.
2. Use IT and other devices to play games involving probability.
3. Recognize events that happen by chance in real-life situations.

Key Inquiry Question(s):
- Record the probability of the chance outcomes in decimals and percentages.
- Use digital devices to play games involving probability.

Core competencies	Values	PCIs
Communication and Collaboration **Critical thinking and Problem solving** **Digital literacy** **Self- efficacy**	**Social cohesion** **Responsibility**	**Environmental awareness** **Self- awareness**

Learning Resources:
- KLB Top Scholar Mathematics Grade 8, pages 202-204

Organisation of Learning:

Introduction (5 minutes):
- Review the previous lesson.
- Guide learners to read and discuss relevant content from the learning resources, emphasizing the understanding of the key concepts.

Lesson Development (30 minutes):

Step 1: Exploring Probability in Real Life
- Discuss why probability is important in real-life situations.
- Provide examples of how probability is used in everyday contexts.

Step 2: Expressing Probability in Decimals and Percentages
- Teach students how to express probability outcomes in decimals and percentages.
- Provide practice exercises for students to convert probabilities.

Step 3: Interactive Probability Games
- Utilize digital devices to engage students in playing games involving probability.
- Encourage students to analyze the outcomes and calculate probabilities.

Step 4: Recognizing Chance Events
- Present real-life scenarios where events occur by chance.
- Have students identify and discuss the probability of these chance events.

Conclusion (5 minutes):

- Summarize key points and learning objectives achieved during the lesson.
- Conduct a brief interactive activity to reinforce the main topics.
- Prepare learners for the next session with a preview of upcoming topics or questions to consider.

Extended Activities:

- Create probability scenarios for students to calculate.
- Design a probability-based quiz or game for peer-to-peer practice.

Teacher Self-Evaluation:

WEEK 7: LESSON 5

SCHOOL	LEVEL	LEARNING AREA	DATE	TIME	ROLL
	GRADE 8	MATHEMATICS			

Strand: Data Handling

and Probability **Sub**

Strand: Probability

Specific Learning Outcomes:

-By the end of the lesson, learners should be able to:

1. Express the probability outcome in decimals or percentages.
2. Use IT and other devices to play games involving probability.
3. Recognize events that happen by chance in real life situations.

Key Inquiry Question(s):
- How do we record the probability of chance outcomes in decimals and percentages?
- How can digital devices be used to play games involving probability?

Core competencies	Values	PCIs
Communication and Collaboration **Critical thinking and Problem solving** **Digital literacy** **Self- efficacy**	**Social cohesion** **Responsibility**	**Environmental awareness** **Self- awareness**

Learning Resources:
- KLB Top scholar Mathematics Grade 8 pages 202-204

Organization of Learning:

Introduction (5 minutes):
- Review the previous lesson on probability.
- Guide learners to read and discuss relevant content from the learning resources, focusing on understanding key concepts.

Lesson Development (30 minutes):

Step 1: Expressing Probability in Decimals
- Explain how to express probability outcomes in decimals.

- Provide examples and practice exercises for students to work on.

Step 2: Expressing Probability in Percentages
- Show how to express probability outcomes in percentages.
- Engage students in conversion exercises and real-life application problems.

Step 3: Using IT and Digital Devices in Probability Games
- Demonstrate how digital devices can be utilized to play games involving probability.
- Engage students in interactive games or simulations to reinforce understanding.

Conclusion (5 minutes):

- Summarize the key points covered in the lesson.
- Conduct a brief interactive activity to reinforce the concepts learned.
- Preview upcoming topics and questions to consider for the next session.

Extended Activities:

- Have students create their own probability games using digital devices.
- Conduct a probability experiment using real-world scenarios and have students calculate the probabilities.

Teacher Self-Evaluation: