

# Lesson Plan Using Geometry

Secondary Courseware Skill Level 3

## Lesson (PLATO):

Curriculum: Foundational Math

Course: Using Geometry

Module: Area: Counting Square Units

## Objective/Skill Activity (PLATO):

Objective: The learners will determine the area of a plane figure by counting square units.

## Content Standard (PLATO/State):

Standard: 5.M.4.1.6

Goal: Explain the difference between perimeter and area of a polygon.

## Anticipatory Set (Teacher):

Activity: Teacher will utilize the PLATO Tutorial as the introduction to this lesson

Materials: Computer, Projector, PLATO Courseware, Offline Activity, Smart Tools if available (CPS Chalkboard)

## Instructional Strategies (Teacher):

- Go through the tutorial as a whole group introduction to this objective
- Check the students understanding of the lesson by utilizing the PLATO Courseware and at the Practice/Application level as a whole group activity.
- Encourage collaborative explorations and discussions using the Math Tools.
- Project the courseware on a screen for classroom demonstrations and discussions.

## Classroom Activities (setting, schedule, time allotment, student guided, and independent practice):

- Whole group interaction with the students by utilizing the PLATO courseware and the learning tools provided with in the courseware.
- Use the courseware as a vehicle for individual support within a problem-solving classroom.
- Encourage peer-tutoring by assigning pairs of learners to work through a tutorial and practice together.

## Extension Activity (Teacher):

- Offline activity will be provided as a follow-up activity
- Develop Journal prompts that encourage the learner to further extend their mathematical knowledge and make connections
- Assign individual lessons to small groups; have each group teach the lesson content to the whole group

## Closure Activity (Teacher):

Review the materials presented through the PLATO Courseware and check the students understanding of the concepts taught

## Assessment Strategy (PLATO/Teacher):

- PLATO Mastery test will be completed by each student and passed with a score of 80% or better.
- Use course level assessments as pre-tests to prescribe modules that target skill gaps.
- Use mastery tests as pre-tests to allow learners to “test out” of particular modules.

- Use printed-out journal exercises and offline activities as part of a portfolio-based assessment plan.

**Follow-up/Comments:**

Students not passing the mastery test will be required to repeat the tutorial and supporting materials before taking the test again

## **Lesson Plan Using Geometry**

Secondary Courseware Skill Level 4

**Lesson (PLATO):**

**Curriculum:** Foundational Math

**Course:** Using Geometry

**Module:** Calculating the Area of rectangles and Squares

**Objective/Skill Activity (PLATO):**

**Objective:** The learners will determine the area of rectangles and squares.

**Content Standard (PLATO/State):**

**Standard:** 4.M.4.1.4

**Goal:** Discuss perimeters of polygons, and areas and perimeters of rectangles and squares, using concrete objects.

**Anticipatory Set (Teacher):**

**Activity:** Teacher will utilize the PLATO Tutorial as the introduction to this lesson

**Materials:** Computer, Projector, PLATO Courseware, Offline Activity, Smart Tools if available (CPS Chalkboard)

**Instructional Strategies (Teacher):**

- Go through the tutorial as a whole group introduction to this objective
- Check the students understanding of the lesson by utilizing the PLATO Courseware and at the Practice/Application level as a whole group activity.
- Encourage collaborative explorations and discussions using the Math Tools.
- Project the courseware on a screen for classroom demonstrations and discussions.

**Classroom Activities (setting, schedule, time allotment, student guided, and independent practice):**

- Whole group interaction with the students by utilizing the PLATO courseware and the learning tools provided with in the courseware.
- Use the courseware as a vehicle for individual support within a problem-solving classroom.
- Encourage peer-tutoring by assigning pairs of learners to work through a tutorial and practice together.

**Extension Activity (Teacher):**

- Offline activity will be provided as a follow-up activity
- Develop Journal prompts that encourage the learner to further extend their mathematical knowledge and make connections
- Assign individual lessons to small groups; have each group teach the lesson content

to the whole group

**Closure Activity (Teacher):**

Review the materials presented through the PLATO Courseware and check the students understanding of the concepts taught

**Assessment Strategy (PLATO/Teacher):**

- PLATO Mastery test will be completed by each student and passed with a score of 80% or better.
- Use course level assessments as pre-tests to prescribe modules that target skill gaps.
- Use mastery tests as pre-tests to allow learners to “test out” of particular modules.
- Use printed-out journal exercises and offline activities as part of a portfolio-based assessment plan.

**Follow-up/Comments:**

Students not passing the mastery test will be required to repeat the tutorial and supporting materials before taking the test again

## **Lesson Plan Using Geometry**

Secondary Courseware Skill Level 5

**Lesson (PLATO):**

Curriculum: Foundational Math

Course: Using Geometry

Module: Calculating the Area of Triangles

**Objective/Skill Activity (PLATO):**

Objective: The learners will determine the area of triangles.

**Content Standard (PLATO/State):**

Standard: 4.M.4.1.4

**Goal:** Discuss perimeters of polygons, and areas and perimeters of rectangles and squares, using concrete objects.

**Anticipatory Set (Teacher):**

**Activity:** Teacher will utilize the PLATO Tutorial as the introduction to this lesson

**Materials:** Computer, Projector, PLATO Courseware, Offline Activity, Smart Tools if available (CPS Chalkboard)

**Instructional Strategies (Teacher):**

- Go through the tutorial as a whole group introduction to this objective
- Check the students understanding of the lesson by utilizing the PLATO Courseware and at the Practice/Application level as a whole group activity.
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**Extension Activity (Teacher):**

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- Develop Journal prompts that encourage the learner to further extend their mathematical knowledge and make connections
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**Closure Activity (Teacher):**

Review the materials presented through the PLATO Courseware and check the students understanding of the concepts taught

**Assessment Strategy (PLATO/Teacher):**

- PLATO Mastery test will be completed by each student and passed with a score of 80% or better.
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**Follow-up/Comments:**

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**Lesson Plan Using Geometry**

Secondary Courseware Skill Level 5

**Lesson (PLATO):**

Curriculum: Foundational Math

Course: Using Geometry

Module: Calculating the Volume of a Rectangular Prism

**Objective/Skill Activity (PLATO):**

Objective: The learners will calculate the volume of a rectangular prism.

**Content Standard (PLATO/State):**

Standard: 6.M.4.1.1

Goal: Describe relationships among types one- and two-dimensional geometric figures, using their defining properties.

**Anticipatory Set (Teacher):**

Activity: Teacher will utilize the PLATO Tutorial as the introduction to this lesson

Materials: Computer, Projector, PLATO Courseware, Offline Activity, Smart Tools if available (CPS Chalkboard)

**Instructional Strategies (Teacher):**

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