

Lesson Plan Plane & Solid Figures

Secondary Courseware Skill Level 3

Lesson (PLATO):

Curriculum: Foundational Math

Course: Plane and Solid Figures

Module: Lines, Parts of Lines, and Angles

Objective/Skill Activity (PLATO):

Objective: The learner will identify points, lines, planes, rays, line segments, and angles.

Content Standard (PLATO/State):

Standard: 5.M.4.1.3

Goal: Identify and label points, lines, line segments, rays, and angles.

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 Plane & Solid Figures

Secondary Courseware Skill Level 3

Lesson (PLATO):

Curriculum: Foundational Math
 Course: Plane and Solid Figures
 Module: Lines in a Plane

Objective/Skill Activity (PLATO):

Objective: The learner will identify parallel, intersecting, and perpendicular lines in a plane.

Content Standard (PLATO/State):

Standard: 4.M.4.1.1

Goal: Identify, compare, and analyze attributes of two- and three- dimensional shapes, including parallel, intersecting, and perpendicular lines, and develop vocabulary to describe their attributes.

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.
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Follow-up/Comments:

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Lesson Plan Plane & Solid Figures

Secondary Courseware Skill Level 3

Lesson (PLATO):

Curriculum: Foundational Math
Course: Plane and Solid Figures
Module: Introduction to Triangles

Objective/Skill Activity (PLATO):

Objective: The learner will identify triangles and their attributes and properties.

Content Standard (PLATO/State):

Standard: 2.M.4.1.1

Goal: Recognize, name, build, compare, and sort the two- and three-dimensional shapes of triangles, rectangles, squares, circles, cones, cubes, spheres, cylinders, and pyramids.

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 Plane & Solid Figures

Secondary Courseware Skill Level 3

Lesson (PLATO):

Curriculum: Foundational Math
 Course: Plane and Solid Figures
 Module: introduction to Quadrilaterals

Objective/Skill Activity (PLATO):

Objective: The learner will identify squares, trapezoids, rectangles, and parallelograms and their attributes and properties.

Content Standard (PLATO/State):

Standard: 6.M.4.1.5

Goal: Identify congruence, similarities, and line symmetry of shapes.

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 (PLATO):

Curriculum: Foundational Math
Course: Plane and Solid Figures
Module: Introduction to Circles

Objective/Skill Activity (PLATO):

Objective: The learner will identify circles and their attributes and properties.

Content Standard (PLATO/State):

Standard: 2.M.4.1.1

Goal: Recognize, name, build, compare, and sort the two- and three-dimensional shapes of triangles, rectangles, squares, circles, cones, cubes, spheres, cylinders, and pyramids.

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 Plane & Solid Figures

Secondary Courseware Skill Level 3

Lesson (PLATO):

Curriculum: Foundational Math
Course: Plane and Solid Figures
Module: Exploring Congruent Figures

Objective/Skill Activity (PLATO):

Objective: Given a geometric figure, the learner will identify a congruent figure.

Content Standard (PLATO/State):

Standard: 6.M.4.1.5

Goal: Identify congruence, similarities, and line symmetry of shapes.

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 Plane & Solid Figures

Secondary Courseware Skill Level 4

Lesson (PLATO):

Curriculum: Foundational Math
Course: Plane and Solid Figures
Module: Exploring Similar Figures

Objective/Skill Activity (PLATO):

Objective: Given a geometric figure, the learner will identify a similar figure.

Content Standard (PLATO/State):

Standard: 6.M.4.1.5

Goal: Identify congruence, similarities, and line symmetry of shapes.

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 Plane & Solid Figures

Secondary Courseware Skill Level 3

Lesson (PLATO):

Curriculum: Foundational Math

Course: Plane and Solid Figures

Module: Line Symmetry in Plane Figures

Objective/Skill Activity (PLATO):

Objective: The learner will identify examples of line symmetry and non-symmetry in plane figures.

Content Standard (PLATO/State):

Standard: 6.M.4.1.5

Goal: Identify congruence, similarities, and line symmetry of shapes.

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

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Follow-up/Comments:

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Lesson Plan Plane & Solid Figures

Secondary Courseware Skill Level 3

Lesson (PLATO):

Curriculum: Foundational Math
Course: Plane and Solid Figures
Module: Introduction to Solid Figures

Objective/Skill Activity (PLATO):

Objective: The learner will identify cylinders, cones, spheres, prisms, cubes, and pyramids and their attributes and properties.

Content Standard (PLATO/State):

Standard: 2.M.4.1.1

Goal: Recognize, name, build, compare, and sort the two- and three-dimensional shapes of triangles, rectangles, squares, circles, cones, cubes, spheres, cylinders, and pyramids.

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
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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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