

# Lesson Plan Understanding Ratio & Proportion

Secondary Courseware Skill Level 6

## Lesson (PLATO):

Curriculum: Foundational Math

Course: Understanding Ratio and Proportion

Module: Understanding Ratio

## Objective/Skill Activity (PLATO):

Objective: The learner will translate between a ratio that describes the relationship of two sets of objects and a model of the ratio.

## Content Standard (PLATO/State):

Standard: 6.M.2.2.1

Goal: Identify and write ratios and scales (on a map).

## 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 Understanding Ratio & Proportion**

Secondary Courseware Skill Level 6

**Lesson (PLATO):**

Curriculum: Foundational Math  
 Course: Understanding Ratio and Proportion  
 Module: Equivalent Ratios

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

Objective: The learner will identify equivalent and non-equivalent ratios.

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

Standard: 6.M.2.2.1

Goal: Identify and write ratios and scales (on a map).

**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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**Lesson (PLATO):**

Curriculum: Foundational Math

Course: Understanding Ratio and Proportion

Module: Understanding Proportion

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

Objective: The learner will use knowledge of proportions to complete a table of equivalent ratios.

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

Standard: 7.M.2.2.1

Goal: Explain rates, and their relationships to ratios, and use proportions to solve problems represented with a diagram.

**Anticipatory Set (Teacher):**

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

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**Lesson Plan Understanding Ratio & Proportion**

Secondary Courseware Skill Level 6

**Lesson (PLATO):**

Curriculum: Foundational Math  
Course: Understanding Ratio and Proportion  
Module: Solving Proportions

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

Objective: Given a proportion problem with one missing element, the learner will complete the proportion.

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

Standard: 7.M.2.2.1

Goal: Explain rates, and their relationships to ratios, and use proportions to solve problems

represented with a diagram.

**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)

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**Lesson (PLATO):**

**Curriculum:** Foundational Math

**Course:** Understanding Ratio and Proportion

**Module:** Solving Ratio, Proportion, and Percent Story Problems

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

**Objective:** The learner will solve problems using addition, subtraction, multiplication, division, fractions, and decimals.

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

**Standard:** 8.M.2.2.1

**Goal:** Use rates, proportions, ratios, and map scales in problem solving situations.

**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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