

# Lesson Plan Dividing Whole Numbers

Secondary Courseware Skill Level 3

## Lesson (PLATO):

Curriculum: Foundational Math  
Course: Dividing Whole Numbers  
Module: Division Basic Facts

## Objective/Skill Activity (PLATO):

Objective: Given an incomplete division sentence of the form  $a \div b = c$ , where  $1 \leq b \leq 10$  and  $0 < c \leq 10$  and the associated multiplication sentence  $c \times b = a$  is a basic multiplication fact, the learner will find the quotient.

## Content Standard (PLATO/State):

Standard:

Goal:

## 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 Dividing Whole Numbers**

Secondary Courseware Skill Level 4

**Lesson (PLATO):**

Curriculum: Foundational Math  
Course: Dividing Whole Numbers  
Module: Dividing by a 1-Digit Number

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

Objective: Given a 1-digit divisor and a 2-digit or 3-digit dividend, the learner will find the quotient.

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

Standard:

Goal:

**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 Dividing Whole Numbers**

Secondary Courseware Skill Level 5

**Lesson (PLATO):**

Curriculum: Foundational Math  
Course: Dividing Whole Numbers  
Module: Dividing by a 2-Digit Number

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

Objective: Given a 3-digit or a 4-digit dividend and a 2-digit divisor, the learner will find the quotient.

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

Standard:

Goal:

**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 Dividing Whole Numbers

Secondary Courseware Skill Level 4

**Lesson (PLATO):**

Curriculum: Foundational Math  
 Course: Dividing Whole Numbers  
 Module: Dividing by Multiples of 10 and 100

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

Objective: The learner will divide a multiple of 100 by a multiple of 10 or by a whole number that yields a quotient that is a multiple of 100.

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

**Standard:**

**Goal:**

**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: Dividing Whole Numbers**

**Module: Writing a Quotient as a Mixed Number**

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

**Objective: Given a 2-digit dividend and a 1-digit divisor, the learner will express the quotient as a mixed number.**

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

**Standard:**

**Goal:**

**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 Dividing Whole Numbers**

Secondary Courseware Skill Level 4

**Lesson (PLATO):**

Curriculum: Foundational Math  
Course: Dividing Whole Numbers  
Module: Identifying Multiples

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

Objective: The learner will identify multiples of a number.

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

Standard:

Goal:

**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 Dividing Whole Numbers

Secondary Courseware Skill Level 5

**Lesson (PLATO):**

Curriculum: Foundational Math

Course: Dividing Whole Numbers

Module: Finding Common Multiples and the Least Common Multiple

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

Objective: Given two numbers, the learner will determine their least common multiple.

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

Standard:

Goal:

**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):**

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**Extension Activity (Teacher):**

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**Closure Activity (Teacher):**

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**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 Dividing Whole Numbers**

Secondary Courseware Skill Level 5

**Lesson (PLATO):**

Curriculum: Foundational Math

Course: Dividing Whole Numbers

Module: Solving Division Story Problems

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

Objective: The learner will solve problems using addition, subtraction, multiplication, and division with whole numbers.

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

**Standard:**

**Goal:**

**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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