

# Lesson Plan (Understanding Addition and Subtraction 2)

Secondary Courseware Skill Level 2

## Lesson (PLATO):

Curriculum: Foundational Math

Course: Understanding Addition and Subtraction 2

Module: Addition and Subtraction Fact Families

## Objective/Skill Activity (PLATO):

Objective: Given three numbers that constitute an addition/subtraction fact family, the learner will write number sentences stating the related addition and subtraction facts.

## Content Standard (PLATO/State):

Standard: 5.M.3.1.3

Goal: Write a fact family when given two factors.

## 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 Addition and Subtraction 2)**

Secondary Courseware Skill Level 3

**Lesson (PLATO):**

Curriculum: Foundational Math

Course: Understanding Addition and Subtraction 2

Module: Checking Subtraction by Addition

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

Objective: Given a subtraction sentence of the form  $a-b=c$ , the learner will construct the matching addition sentence  $c+b=d$  and determine if  $d=a$ , thereby checking the correctness of the subtraction sentence.

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

Standard: 4.M.1.2.2

Goal: Add and subtract whole numbers.

**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 Addition and Subtraction 2)

Secondary Courseware Skill Level 3

**Lesson (PLATO):**

Curriculum: Foundational Math

Course: Understanding Addition and Subtraction 2

Module: Using the Identity Property of Addition

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

Objective: The learners will apply the identity property of addition.

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

Standard: 6.M.3.2.1

Goal: Use the following properties in evaluating numerical expressions: commutative, associative, identity, zero, inverse, and distributive.

**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:**

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

## **Lesson Plan (Understanding Addition and Subtraction 2)**

Secondary Courseware Skill Level 3

**Lesson (PLATO):**

Curriculum: Foundational Math

Course: Understanding Addition and Subtraction 2

Module: Using the Commutative Property of Addition

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

Objective: The learner will apply the commutative property of addition.

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

Standard: 6.M.3.2.1

Goal: Use the following properties in evaluating numerical expressions: commutative,

associative, identity, zero, inverse, and distributive.

**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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**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:**

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:** Understanding Addition and Subtraction 2

**Module:** Using the Associative Property of Addition

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

**Objective:** The learner will apply the associative property of addition.

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

**Standard:** 6.M.3.2.1

**Goal:** Use the following properties in evaluating numerical expressions: commutative, associative, identity, zero, inverse, and distributive.

**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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