Lesson Plan Multiplying Whole Numbers

Secondary Courseware Skill Level 3

Lesson (PLATO):
Curriculum: Foundational Math
Course: Multiplying Whole Numbers
Module: Multiplying by 0 through 5: Multiplication Basic Facts

Objective/Skill Activity (PLATO):
Objective: Given an incomplete multiplication sentence of the form b x c = _, where one factor is in the range 0 through 5 inclusive and the other factor is in the range 0 through 10 inclusive, the learner will find the product.

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 Multiplying Whole Numbers

Secondary Courseware Skill Level 3

Lesson (PLATO):

Curriculum: Foundational Math
Course: Multiplying Whole Numbers
Module: Multiplying by 6 through 10: Multiplication Basic Facts

Objective/Skill Activity (PLATO):

Objective: Given an incomplete multiplication sentence in the form of b x c=__, where one factor is the range 6 through 10 inclusive and the other factor is in the range 0 through 10 inclusive, the learner will find the product.

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 Multiplying Whole Numbers

Secondary Courseware Skill Level 3

Lesson (PLATO):

Curriculum: Foundational Math
Course: Multiplying Whole Numbers
Module: Multiplying a 2-digit Number by a 1-digit number

Objective/Skill Activity (PLATO):

Objective: Given a 1-digit number and a 2-digit number , the learner will find the product using a partial products algorithm.

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 Multiplying Whole Numbers	**Secondary Courseware Skill Level 3**

Lesson (PLATO):
Curriculum: Foundational Math
Course: Multiplying Whole Numbers
Module: Multiplying by a Multiple of 10 or 100
Objective/Skill Activity (PLATO):
Objective: Given a 1-digit or 2-digit number and a multiple of 10 (including 10) or 100 (including 100), the learner will find the product.

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 Multiplying Whole Numbers

Secondary Courseware Skill Level 4

Lesson (PLATO):
Curriculum: Foundational Math
Course: Multiplying Whole Numbers
Module: Multiplying a 3-Digit Number by a 1-Digit Number
Objective/Skill Activity (PLATO):
Objective: Given a 1-digit number and a 3-digit number, the learner will find the product.

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 Multiplying Whole Numbers

Secondary Courseware Skill Level 4

Lesson (PLATO):
Curriculum: Foundational Math
Course: Multiplying Whole Numbers
Module: Multiplying a Multiple of 10 by a Multiple of 10
Objective/Skill Activity (PLATO):
Objective: The learner will find the product of two 2-digit multiples of 10.

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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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 Multiplying Whole Numbers

Secondary Courseware Skill Level 4

Lesson (PLATO):

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

Objective/Skill Activity (PLATO):

Objective: Given two 2-digit numbers, the learner will find the product.

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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Follow-up/Comments:
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