

Differentiated Learning

Grade Level: 2

Topic: 11 Three-Digit Addition and Subtraction

Domain Covered:

Number and operations in base ten

Clusters: (write out in words)

Use place value understanding and properties of operations to add and subtract.

Content Standards: (write out in words)

Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction' relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.

Explain why addition and subtraction strategies work, using place value and the properties of operations.

Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.

Learning Targets for this Unit

*Found in teacher's manual under objectives for each topic lesson

11-1 children will explore different strategies for adding three-digit numbers.

11-2 children will add three-digit numbers mentally without regrouping

11-3 children will use place value blocks to add two three-digit numbers with regrouping

11-4 children will use paper and pencil to add two three-digit numbers with regrouping

11-5 children will explore different strategies to subtract three-digit numbers

11-6 children will be given a quantity and one of its parts, and then will find the missing part by counting on or counting back.

11-7 children will use models to subtract three-digit numbers with regrouping

11-8 children will subtract three digit numbers using a standard algorithm.

11-9 children will use logically reasoning to solve problems

Practice Standards: (Delete the practices that will NOT be used)

- **Make sense of problems and persevere in solving them.**
- **Reason abstractly and quantitatively.**
- **Construct viable arguments and critique the reasoning of others.**
- **Model with mathematics.**
- **Use appropriate tools strategically.**
- **Attend to precision.**
- **Look for and make use of structure.**
- **Look for and express regularity in repeated reasoning**

Differentiated Activities

Directions: Use your Teacher Manual for your assigned Topic to complete this page and create student materials

Advanced/Gifted:

pg. 337 C

Quick Synopsis of Activity & Materials Needed-

Children can consider zeros in the minuend. Place value materials. Example $502 - 346$. Use mental math to find $450 - 300$. Ask how this could help find $450 - 299$ mentally.

Math Project

pg. 338

Quick Synopsis of Activity & Materials Needed-

Help children research large marine animals. Have each child select an animal whose weight is given as a three-digit number. Have the child draw a picture of the animal and write its weight. Then have pairs of children work together to create a subtraction problem that compares the weights of their two animals.

Math and Literature:

pg. 11-12 in the Guided Problem Solving for the Math Library

Quick Synopsis of Activity & Materials Needed-

Coyotes All Around by Stuart J. Murphy, draw number line, Math Master page 12.

-reading and writing numbers to 1000

-ordering numbers

-before, after, and between

-problem solving: look for pattern

Additional problem: have children determine the next number in these patterns:

150, 160, 170, _____, _____

730, 732, 734, _____, _____

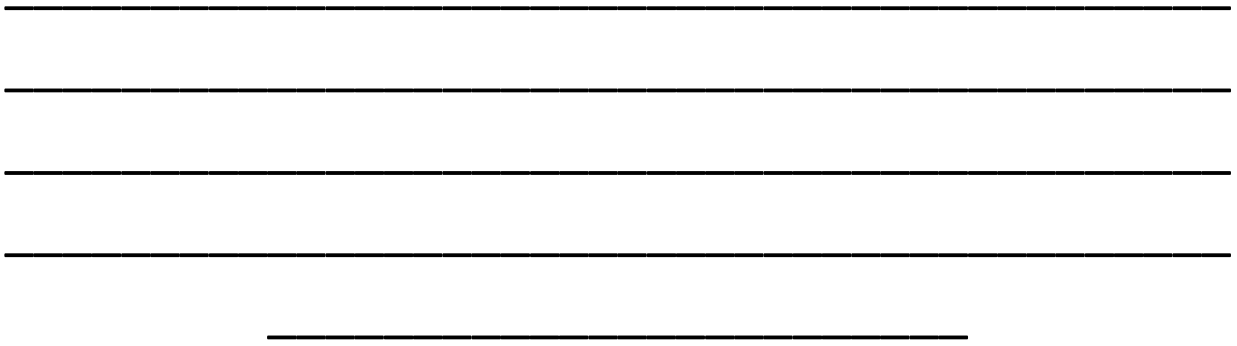
935, 940, 950, _____, _____



Name: _____



Topic 11 – Math Project



Name: _____

Topic 11 Math Literature Extension



Determine the next numbers in the pattern:

1. 731, 735, _____, 743, 747
2. 445, 446, 448, 451, _____, 460, 466
3. 281, 284, _____, _____, 293
4. 836, 834, 832, _____, _____, 826
5. 200, 220, 240, _____, _____
6. 989, 986, 983, _____, _____, 974

Name: _____

Topic 11 Math Literature Extension



Determine the next numbers in the pattern:

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2. 445, 446, 448, 451, _____, 460, 466
3. 281, 284, _____, _____, 293
4. 836, 834, 832, _____, _____, 826
5. 200, 220, 240, _____, _____
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