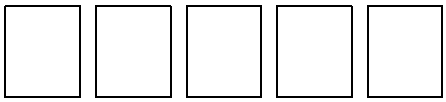
Name _____ Date _____

Master 2.9

Additional Activity 1: Go for the Greatest

Work in a group.
You will need a calculator.
You will need a decahedron numbered 0 to 9.
The goal is to make the greatest number in this number frame.



- Players take turns to roll the decahedron and record the number in any position in their number frame.
  Once a player has recorded a number, he or she cannot move it.

- Play continues until each player has filled her or his number frame.

- The player with the greatest number scores 2 points.
  The player with the least number scores 1 point.
  The first player to score 8 points wins.

Take It Further:
At the end of each round, arrange all the numbers in order from greatest to least.

Name _____ Date _____

Master 2.10

Additional Activity 2: What's the Difference?

Work with a partner.
You will need a set of digit cards numbered 0 to 9.

- Shuffle the digit cards and place them face down on the table.
- Player 1 selects 4 digit cards and makes the least number possible.
- Player 2 turns over 3 cards and makes the greatest number possible.
  Player 1 finds the difference between the 4-digit number and the 3-digit number.
- Players switch roles.
- The player with the least difference scores 1 point.
  If there is a tie, both players score 1 point.
- The player with more points after 8 rounds of play is the winner.

Take It Further:
Play the game again. This time, use 4 sets of digit cards.

Name _____ Date _____

Master 2.11

Additional Activity 3: Powerful Products

Work with a partner.
You will need 2 sets of digit cards each numbered 0 to 9.

- Shuffle the digit cards and place them face down on the table.
  Each player takes 3 cards.

- Arrange your cards to make a 2-digit by 1-digit multiplication problem with the greatest product.
  Record your multiplication problem.

- Compare your product and your partner's product.
  The player with the greater product scores 1 point.

- Play continues for 6 rounds.
  The player with the greater score wins.

Take It Further:
Play the game again. This time, take 4 cards each.
Make a 2-digit by 2-digit multiplication problem.
The player with the greater product scores a point.

Name _____ Date _____

Master 2.12a

Additional Activity 4: The Range Game

Play with a partner.
Your teacher will give you a set of range cards.

- Shuffle the range cards and place them facedown in a pile.
  Take turns to select a range card.

- Player 1 chooses a factor and finds the product or quotient.
  If the result is in the range, Player 1 scores a point.
  If not, Player 2 chooses a factor and finds the product or quotient.

- Play continues until one player chooses a factor that gives a result in the range.
  That player scores 1 point.

- The first player to score 5 points wins.

Take It Further:
Make your own set of range cards.
Trade sets with another pair of students and play the game.

Name _____ Date _____

Master 2.12b

Range Cards

36 × □ Product is between 1900 and 2000.	9477 ÷ □ Quotient is between 1050 and 1350.	73 × □ Product is between 1600 and 2000.
8188 ÷ □ Quotient is between 1640 and 2040.	59 × □ Product is between 3050 and 3190.	2007 ÷ □ Quotient is between 330 and 600.
14 × □ Product is between 125 and 175.	7621 ÷ □ Quotient is between 950 and 1270.	61 × □ Product is between 3900 and 4150.
6850 ÷ □ Quotient is between 1700 and 2300.	49 × □ Product is between 780 and 980.	763 ÷ □ Quotient is between 105 and 155.
4 × □ Product is between 2730 and 2780.	5435 ÷ □ Quotient is between 600 and 900.	9 × □ Product is between 1280 and 1440.

