COASTMETRO

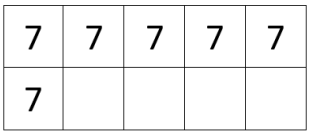
ELEMENTARY MATH PROJECT

Grade 4

Key Number Concept 1:
Multiplication and Division Facts (Computational Fluency)

Sample Week at a Glance

Before this week of lessons, grade 4 students will have developed an understanding of and some fluency with their foundational multiplication (and corresponding division) facts (0, 1, 2, 5, 10).

Monday	Number talk: 6 x 7. How could you figure this out? (give students access to a whiteboard). Lead discussion toward using 5 x 7 to calculate 6 x 7. The following image may be helpful:  Ask students to develop all of their x 6 facts using this strategy, and challenge them to use it to derive x 4. Closing circle - share and discuss strategies used and aha moments
Tuesday	Exploration: Complete a partially filled in multiplication chart Investigation: What fraction of the multiplication chart is even? Odd? Why? Closing Circle - How could what we have learned today help us check the reasonableness of our answers when we multiply? (e.g., I know 6 x 7 is even, so if I answer 49 by accident, I know it can't be right!)
Wednesday	Number string: 5 x 6 6 x 6 3 x 6 2 x 6 4 x 6 Game: Play Strive to Derive from Math Fact Fluency, or Multiplication Tic-Tac-Toe from mathforlove.com. Note: encourage students to use the mental math strategies they have been developing rather than counting on their fingers.

	Closing circle - have students share what they learned from playing the game, and if they noticed a connection to the number string at the beginning
Thursday	Number talk: 9 x 6. How could you figure this out? Lead discussion toward using 10 x 6 or 9 x 5 to help. Math Workshop -provide a collection of symbolic multiplication cards that show facts that students could derive from x2, x5, x10 such as x3, x4, x6, x9 and have students represent each fact in terms of known facts. They can draw arrays, other diagrams, or write symbolically -subtraction facts math game (maintaining computational fluency) -multiplication facts math game (developing computational fluency) -Teacher led small group instruction: ways to multiply using known facts OR practice building fluency with foundational facts Closing Circle - students sharing what they did, what they learned and where they want to go next with their learning about multiplication facts
Friday	How many ways can you figure out 6 x 8? Record on whiteboard. Start connecting multiplication facts and strategies with division. Play The Factor Game from Math Fact Fluency. Closing Circle - why is it important to develop and use these strategies instead of just skip-counting?

Based on formative assessment information from this week, next week's planning would include extending multiplication strategies to two-digit by one-digit multiplication, as well as more practice with single digit multiplication, and division within 100.