Master 46: Activity 20 Assessment
Exploring Properties

Exploring Properties of Addition and Subtraction Behaviours/Strategies		
1. Student turns over a card, but struggles to explore properties of addition and subtraction (e.g., adding or subtracting zero, commutativity of addition) and does not know how to represent adding or subtracting zero with counters. "How do I show adding zero with counters?"	2. Student explores properties of addition and subtraction, but thinks matching expressions must have the same numbers in the same order and the same operation(s). "How can 17 – 0 and 15 + 2 match?"	3. Student explores properties of addition and subtraction and represents expressions with counters, but struggles to compare counters.

Observations/Documentation

4. Student explores properties of addition and subtraction, but does not match a card with addition (subtraction) to a card with multiplication (division). "They can't match. This one adds numbers and that one multiplies numbers."	5. Student explores properties of addition and subtraction, but does not recognize any patterns in matching cards. "I don't see any patterns."	6. Student successfully explores properties of addition and subtraction (e.g., adding or subtracting zero, commutativity of addition, relating addition to multiplication and subtraction to division) and recognizes patterns. "It doesn't matter what order you add the numbers. Adding or subtracting zero doesn't make a difference."

Observations/Documentation