|  |  |  |
| --- | --- | --- |
| **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?” | 1. 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?” | 1. Student explores properties of addition and   subtraction and represents expressions with  counters, but struggles to compare counters. |
| **Observations/Documentation** | | |
|  |  |  |
|  |  |  |
| 1. 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.” | 1. Student explores properties of addition and   subtraction, but does not recognize any  patterns in matching cards.  “I don’t see any patterns.” | 1. 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** | | |
|  |  |  |