Guess My Rule: 
The Function Machine Game

Materials (per partners):
- Guess My Rule card deck (Copy decks onto different color card stock, if possible)
- Function Machine template in sleeve protector
- Dry-erase pen and eraser

Directions:
- Partner A shuffles the card deck and turns over the first card without showing it to Partner B.
- Partner B uses the Function Machine template and records an “in” number.
- Partner A uses this number in the rule from the card. Partner A announces the “out” number.
- Partner B writes the number in the “out” column on the Function Machine template.
- Partner B records a different “in” number on the Function Machine template.
- Partner A again uses this number in the rule and announces the “out” number.
- Player B records the “out” number in the appropriate place on the Function Machine in/out table.
- Player B may guess the rule at any time by writing the rule in the rule space on the function machine and saying it aloud.
- If Player B’s rule is correct, he/she scores one point for each number in the “in” column (e.g. one point for each guess).
- If Player B’s rule is not correct, he/she writes down another “in” number and play continues until Player B identifies the correct rule.
- Players switch positions. Player B draws a card and Player A must now use the Function Machine Template to record “in” and “out” numbers.
- The game consists of 3-5 rounds. Player with the lowest score wins since this is the player who guessed the rule with the fewest clues.

Differentiation:
- Use different decks to best match ability levels (e.g. only addition and subtraction for a basic game or two-rules cards for enrichment)
<table>
<thead>
<tr>
<th>Rule: Add 5</th>
<th>Rule: Subtract 3</th>
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<tbody>
<tr>
<td>Rule: Add 8</td>
<td>Rule: Subtract 1</td>
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<tr>
<td>Rule: Add 2</td>
<td>Rule: Add the number</td>
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<tr>
<td>Rule: Add 10</td>
<td>Rule: Subtract 2</td>
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<tr>
<td>Rule: Add 4</td>
<td>Rule: Add 7</td>
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<tr>
<td>Rule: Add 20</td>
<td>Rule: Subtract 5</td>
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<tr>
<td>Rule: Multiply by 2</td>
<td>Rule: Multiply by 5</td>
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<tr>
<td>Rule: Multiply by 3</td>
<td>Rule: Add the number</td>
</tr>
<tr>
<td>Rule: Multiply by 10</td>
<td>Rule: Multiply by 4</td>
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<tr>
<td>Rule: Multiply by 6</td>
<td>Rule: Multiply by 9</td>
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<tr>
<td>Rule:</td>
<td>Multiply by 2 then add 3</td>
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<tr>
<td>Rule:</td>
<td>Multiply by 2 then subtract 1</td>
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<tr>
<td>Rule:</td>
<td>Multiply by 3 then add 1</td>
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<tr>
<td>Rule:</td>
<td>Multiply by 4 then add 7</td>
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<tr>
<td>Rule:</td>
<td>Multiply by 6 then subtract 1</td>
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<td>Guess My Rule</td>
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