

Fraction Number Sense Assessment

Name: _____ Date: _____

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|----------------------------------|-----|
| Subitizing/Spatial Relationships | /9 |
| Counting/Cardinality | /10 |
| One/Two More/Less | /11 |
| Benchmarks | /9 |
| Part-Part- Whole | /7 |

Subitizing/Spatial Relation score _____ **out of 9** **Observations**

| | | |
|-------------------|--|--|
| 3.NF.1 | <p>1. “Draw me a picture of $\frac{3}{4}$”</p> <ul style="list-style-type: none"> ○ Draws $\frac{3}{4}$ by fairly accurately partitioning a whole. (2) ○ Draws $\frac{3}{4}$ but does not draw it somewhat equally OR draws $\frac{3}{4}$ as 4 items with 3 shaded in(1) ○ Does not draw $\frac{3}{4}$ (0) | |
| 3.NF.1 | <p>2. “Tell me what fraction of the picture is gray.” (<i>Display $\frac{2}{6}$ subitizing card</i>)</p> <ul style="list-style-type: none"> ○ Says correct amount within 3 sec without counting (2) ○ Counts each partition to determine amount shaded (1) ○ Does not give the correct number (0) | |
| 3.NF.3d 4.NF.2 | <p>3. <i>Show $\frac{1}{2}$ and $\frac{2}{4}$ subitizing cards.</i> “Tell me if one of the pictures has more, less, or if they are equal.”</p> <ul style="list-style-type: none"> ○ Instantly tells the cards have the same amount. (2) ○ Determines amount on each card, then tells they are equal.(1) ○ Does not know.(0) | |
| 3.NF.3d 4.NF.2 | <p>4. “I am going to flash two pictures.” <i>Show $\frac{1}{3}$ for a few seconds, remove it from view, show the $\frac{1}{2}$ and ask, “What is the same/different from the first card?” - if cannot tell then show both pictures at the same time.(Prompt to tell about size of pieces if needed)</i></p> <ul style="list-style-type: none"> ○ Can describe what is different when both cards are not in front of them(3) ○ Can describe what is similar & different with cards in front. (2) ○ Focuses on the number of pieces (“This card has 3, this card has 2.”) Prompt them to focus on the size of the pieces to see if they can get to level 2 (1) ○ Doesn’t know what is the same or different.(0) | |



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Counting/Cardinality score ____ out of 10

Observations

| | | |
|--------------------------------------|---|--|
| <p>3.NF.1 4.NF.3a</p> | <p>1. “Start counting forwards from $\frac{1}{4}$.” Stop at $\frac{10}{4}$ or 2 $\frac{1}{4}$. “Now count back from $\frac{12}{3}$.” Stop at $\frac{0}{3}$.</p> <ul style="list-style-type: none"> ○ Both Correct & Fluent(2) ○ Any Delayed yet All Correct or only one correct(1) ○ Any Incorrect(0) | <p>1/4, 2/4, 3/4, 4/4 (or 1), 5/4, 6/4, 7/4, 8/4 (or 2), 9/4, 10/4</p> <p>12/3, 11/3, 10/3, 9/3, 8/3, 7/3, 6/3, 5/3, 4/3, 3/3, 2/3, 1/3, 0/3</p> |
| <p>3.NF.1 4.NF.3a</p> | <p>2. “Start at $\frac{3}{8}$ and count up by $\frac{2}{8}$s.” (Stop student at 15/8)</p> <ul style="list-style-type: none"> ○ Correct & Fluent(2) ○ Any Delayed yet All Correct(1) ○ Any Incorrect(0) | <p>3/8, 5/8, 7/8, 9/8, 11/8, 13/8, 15/8,</p> |
| <p>3.NF.1 4.NF.3a</p> | <p>3. Show card with 1/4 shaded on three rectangles. “Write down how much is showing.”</p> <ul style="list-style-type: none"> ○ Correct writes $\frac{3}{4}$(2) ○ Can say amount but cannot write it correctly.(1) ○ Incorrect(0) | |
| <p>4.NF.3a</p> | <p>4. Show image of $\frac{5}{6}$ with $\frac{3}{6}$ covered and $\frac{2}{6}$ showing. Say, “I have $\frac{5}{6}$ how much is covered?”</p> <ul style="list-style-type: none"> ○ Gives answer of $\frac{3}{6}$ instantly. (2) ○ Counts one by one to figure out.(1) ○ Incorrect answer (0) | |
| <p>4.NF.3d 5.NF.3 5.NF.6</p> | <p>5. Display a group of 3 pies and 5 people. Say, “Do we have enough pie so that each person can have $\frac{1}{4}$ of a pie? Explain your thinking.” (If needed they can work out on paper. If correct, ask, “Is there enough for each person to get $\frac{3}{4}$ of a pie?”)</p> <ul style="list-style-type: none"> ○ Correctly explains both. (2) ○ Can explain easier problem but not harder or needs paper/pencil to solve.) (1) ○ Incorrect answer (0) | |



One/Two More/Less score _____ out of 11

Observations

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|---------------------------|--|---|
| <p>3.NF.1 4.NF.3a</p> | <p>1. Show $\frac{2}{5}$ subitizing card, ask, “What amount is shaded?” Then say “What amount would be shaded if I shaded in one more section?” If correct, do the same with $\frac{7}{10}$. Next show $\frac{1}{3}$ and ask, “What amount would be shaded if I shaded in two more sections?”). If correct, do the same with $\frac{7}{8}$.</p> <ul style="list-style-type: none"> ○ All four correct. (3) ○ At least two correct (2) ○ Gives correct amount for one.(1) ○ Incorrect answer (0) | <p>1M: $\frac{2}{5}$ $\frac{7}{10}$ $\frac{3}{5}$ $\frac{8}{10}$ $\frac{5}{5}$ $\frac{10}{10}$</p> <p>2M: $\frac{1}{3}$ $\frac{7}{8}$ $\frac{3}{3}$ $\frac{9}{8}$ or $1\frac{1}{8}$ $\frac{3}{3}$ $\frac{8}{8}$ or $1\frac{1}{8}$</p> |
| <p>3.NF.1 4.NF.3a</p> | <p>2. Show $\frac{3}{6}$ subitizing card, ask, “What amount is shaded?” then say “What amount would be shaded if I shaded in one less section?” If correct, do the same with $\frac{4}{3}$. Next show $\frac{5}{10}$ and ask, “What amount would be shaded if I shaded in two less sections?” If correct, do the same with $\frac{5}{4}$.</p> <ul style="list-style-type: none"> ○ Correct answer when presented with more difficult fraction (crosses “whole”) (3) ○ Can double the amount in their head(2) ○ Needs paper/pencil to determine answer(1) ○ Incorrect answer (0) Try smaller numeral | <p>1L: $\frac{3}{6}$ $\frac{4}{3}$ $\frac{2}{6}$ $\frac{3}{3}$ or 1 $\frac{2}{6}$ $\frac{3}{3}$</p> <p>2L: $\frac{5}{10}$ $\frac{5}{4}$ $\frac{3}{10}$ $\frac{3}{4}$ $\frac{10}{10}$ $\frac{4}{4}$</p> |
| <p>3.NF.1 4.NF.3a</p> | <p>3. Show $\frac{2}{4}$ fraction card. Ask, “what number is one-fourth more than this number?” (If correct, show $\frac{6}{8}$ - ask, “What is one-eighth more?”). Next show $\frac{3}{5}$ and ask, “What number is two-fifths more?” (If correct, show $\frac{5}{6}$ and ask “What is $\frac{2}{6}$ more?”).</p> <ul style="list-style-type: none"> ○ Correct answer when presented with more difficult fraction (crosses “whole”) (3) ○ Correct answer for +1 & +2 (2) ○ Correct answer for +1(1) ○ Incorrect answer (0) | <p>1M: $\frac{2}{4}$ $\frac{6}{8}$ $\frac{3}{4}$ $\frac{7}{8}$ $\frac{4}{4}$ $\frac{8}{8}$</p> <p>2M: $\frac{3}{5}$ $\frac{5}{6}$ $\frac{5}{5}$ or 1 $\frac{7}{6}$ or $1\frac{1}{6}$ $\frac{5}{5}$ or 1 $\frac{6}{6}$ or $1\frac{1}{6}$</p> |
| <p>3.NF.1 4.NF.3a</p> | <p>4. Show $\frac{2}{3}$ fraction card. Ask, “What number is one-third less than this number?”(If correct, show $\frac{5}{7}$ - ask, “What is one-seventh less?”). Next show $\frac{4}{5}$ and ask, “What number is two-fifths less?” (If correct, show $\frac{9}{6}$ - ask, “What number is $\frac{2}{6}$ less?”)</p> <ul style="list-style-type: none"> ○ Correct answer when presented with more difficult fraction (3) ○ Correct answer for -1 & -2 (2) ○ Correct answer for -1(1) ○ Incorrect answer (0) (Try smaller amount or visual) | <p>1L: $\frac{2}{3}$ $\frac{5}{7}$ $\frac{1}{3}$ $\frac{4}{7}$ $\frac{1}{3}$ $\frac{4}{7}$</p> <p>2M: $\frac{4}{5}$ $\frac{9}{6}$ $\frac{2}{5}$ $\frac{7}{6}$ $\frac{5}{5}$ $\frac{6}{6}$</p> |

Benchmark 5 & 10 score _____ out of 9

Observations



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|--------------------------------------|--|--|
| <p>3.NF.2 4.NF.2</p> | <p>1. Give a number line that has 0 & 1 on each end. “Show me where $\frac{7}{16}$ would go on this number line. Explain your thinking.” (If cannot do $\frac{7}{16}$ try easier $\frac{2}{3}$)</p> <ul style="list-style-type: none"> ○ Uses halfway benchmark to determine where $\frac{7}{16}$ goes (2) ○ Gets in the general area of where $\frac{7}{16}$ should be or can do easier fraction)(1) ○ Does not give accurate response (0), | |
| <p>4.NF.2</p> | <p>2. Give a number that is less than a benchmark number & ask how far to the nearest benchmark. “If I have $\frac{4}{5}$, how much more do I need to get to 1?”</p> <ul style="list-style-type: none"> ○ Just know you need to add $\frac{1}{5}$ more(2) ○ Draws visual to help.(1) ○ Cannot do the task (0) | |
| <p>4.NF.2</p> | <p>3. Give a number that is more than a benchmark number & ask how much needs to be taken away to get to the nearest benchmark. “If I have $\frac{3}{4}$, how much do I need to take away to get to $\frac{1}{2}$?”</p> <ul style="list-style-type: none"> ○ Just knows you need to take away $\frac{1}{4}$ (2) ○ Draws visual to help.(1) ○ Cannot do the task (0) | |
| <p>3.NF.3d 4.NF.2 5.NF.5</p> | <p>4. Say, “If I have $\frac{4}{5}$ and $\frac{8}{9}$, which one is closer to 1?”</p> <ul style="list-style-type: none"> ○ Knows which one is closer (Might say “$\frac{1}{9}$ is a smaller piece so it’s closer to 1 or whole.”) (3) ○ Draws a visual to help.(2) ○ Says they are both “1 away” so they are equal distance to benchmark.)or incorrectly uses the relationship (for example, “$\frac{1}{9}$ is a smaller pieces and fourths are bigger so $\frac{3}{4}$ is closer to 1:) (1) ○ Cannot do the task(0) | |



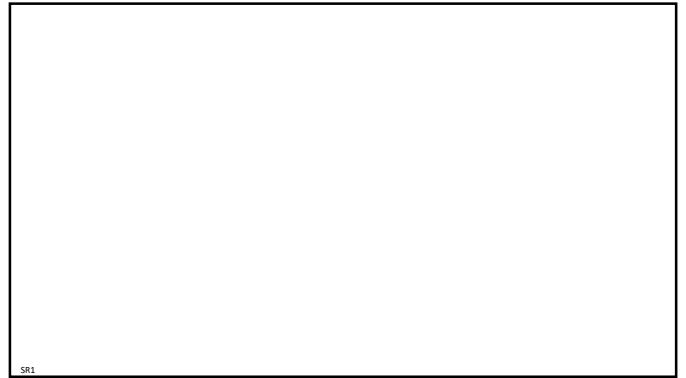
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| <p>3.NF.1 4.NF.3a 4.NF.3b 5.NF.1,4</p> | <p>1. <i>Show the fraction $\frac{3}{4}$.</i> “What are some different ways to make this fraction. Using any operation, and numbers or fractions, show me as many ways as you can think of.”</p> <ul style="list-style-type: none"> ○ Gives ways to make $\frac{3}{4}$ that does not use only fourths (like $\frac{1}{2} + \frac{1}{4}$) (3) ○ Gives at least 3 ways to make $\frac{3}{4}$. (2) ○ Gives 1-2 ways to make $\frac{3}{4}$. (1) ○ Can't show a way to make $\frac{3}{4}$. (0) | |
| <p>4.NF.3a, 4.NF.3b</p> | <p>2. <i>Show $\frac{5}{8}$ using fraction strips.</i> “I have $\frac{5}{8}$.” Count them out loud so the student can hear. “Now, close your eyes. I am going to hide some of them.” Hide $\frac{3}{8}$. “We had $\frac{5}{8}$, but there are only these left. What did I hide?”</p> <ul style="list-style-type: none"> ○ Can tell within 5 seconds you took away $\frac{3}{8}$. (2) ○ Counts one-by-one to figure out how many you hid. (1) ○ Cannot determine the amount hid. (Try a smaller number and see if they can determine how many you hide.) (0) | |
| <p>4.NF.3a, 4.NF.3b 5.NF.1</p> | <p>3. “This card has a total of $\frac{4}{6}$ on it, but part of it is covered by this post-it note. The other two parts combine to make $\frac{4}{6}$. Can you tell me how much is covered by the post-it?”</p> <ul style="list-style-type: none"> ○ Can do this with fraction parts with unlike denominators. (3) ○ Can tell within 3 seconds how much is hiding (2) ○ Counts or needs paper & pencil to determine amount (1) ○ Does not give an accurate answer. (Try a smaller amount & see if they can determine how much is covered. If they can 1 pt) (0) | |

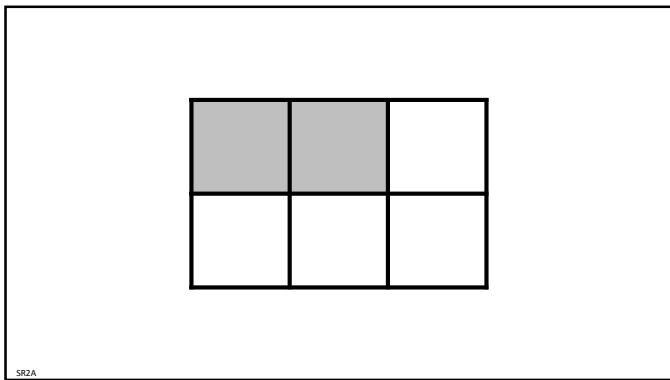


**3rd-5th Grade
Number Sense
Fractions Assessment**

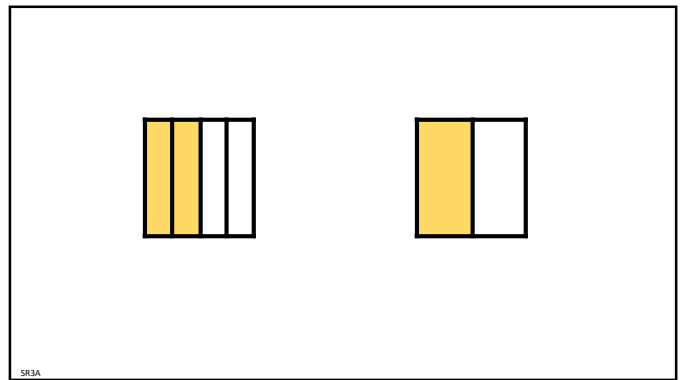
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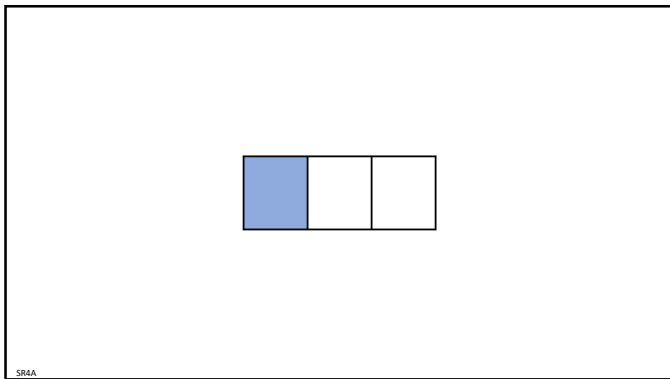
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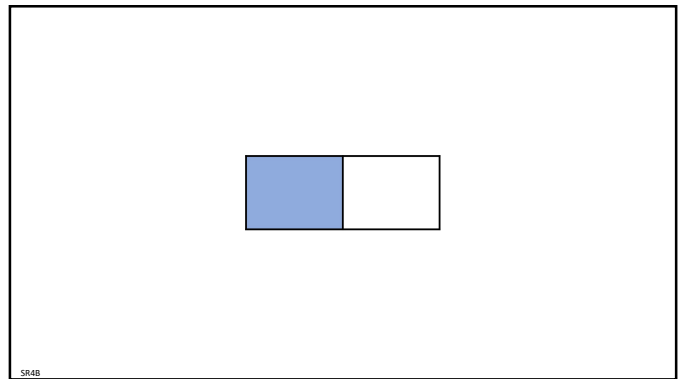
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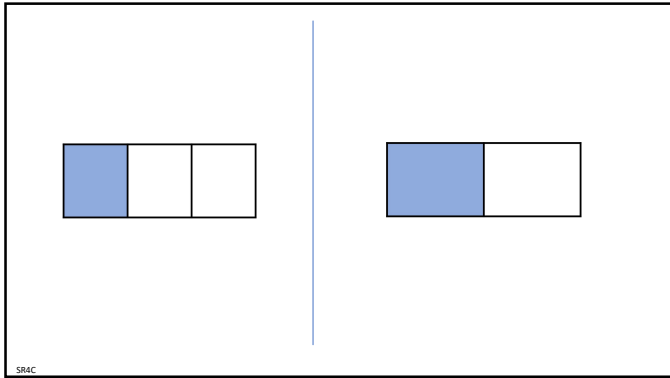
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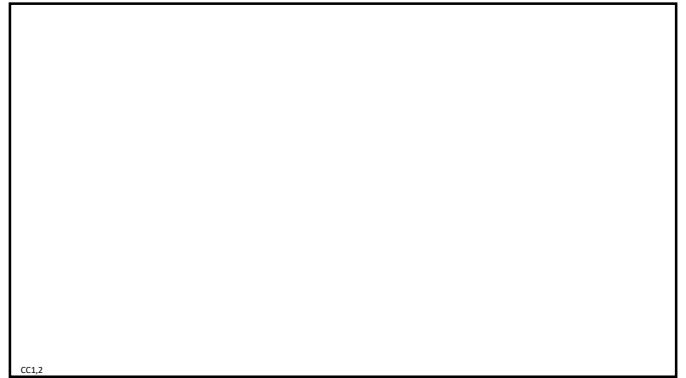
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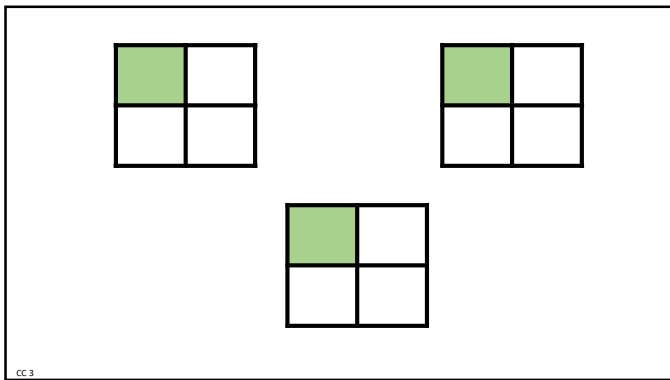
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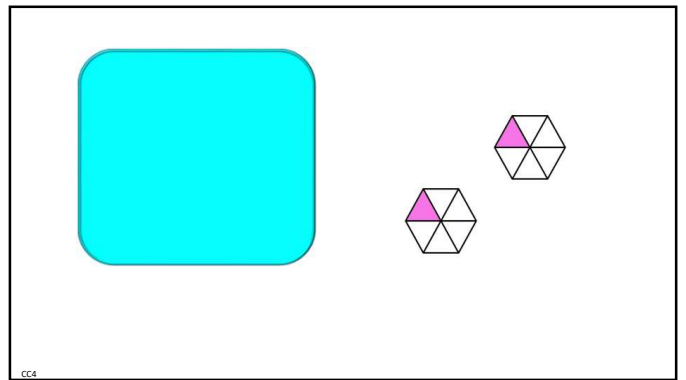
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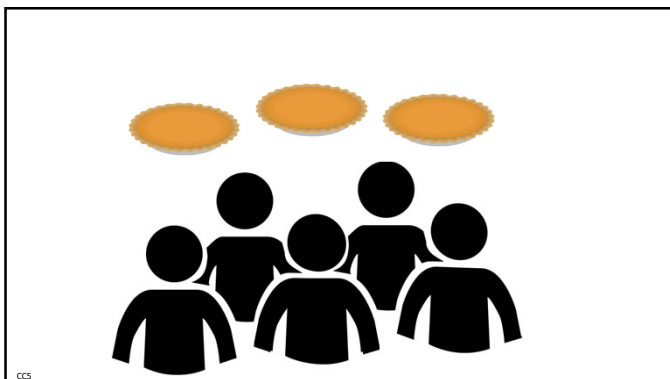
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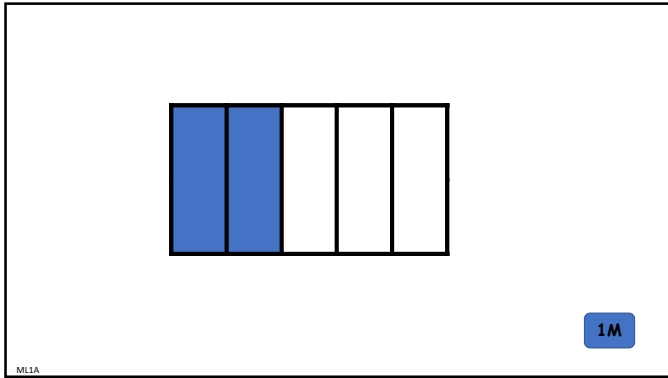
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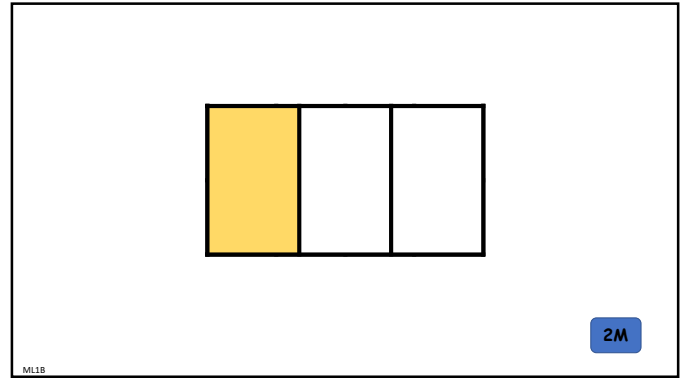
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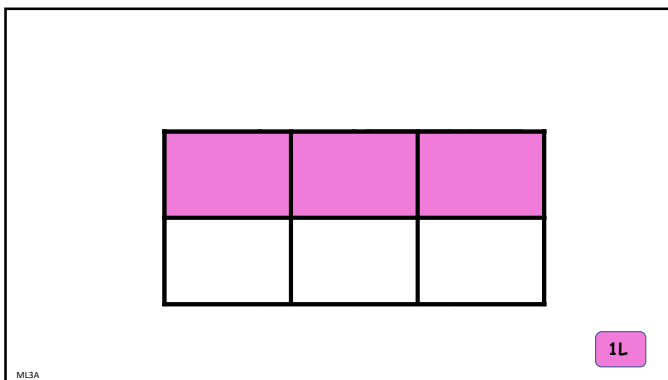
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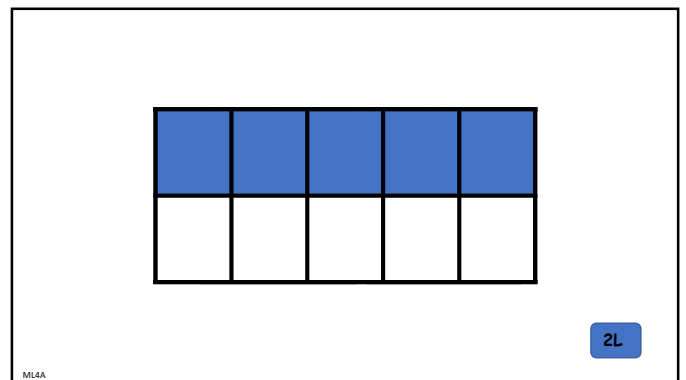
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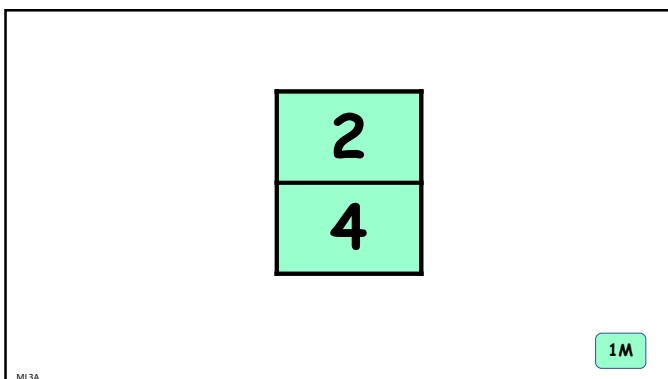
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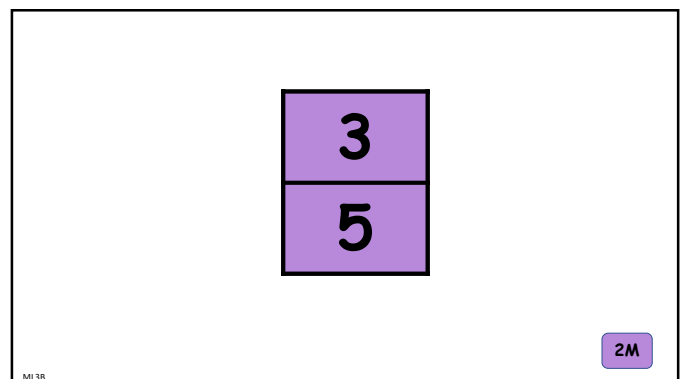
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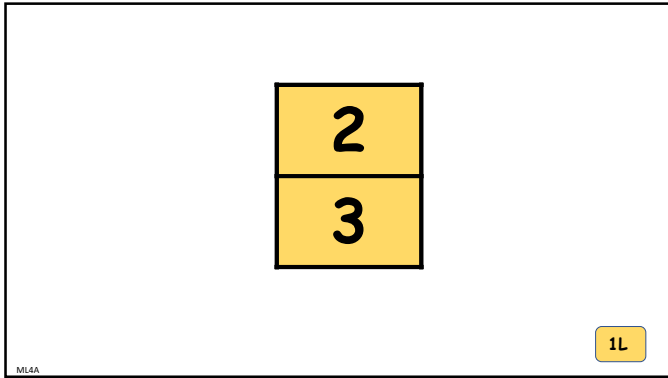
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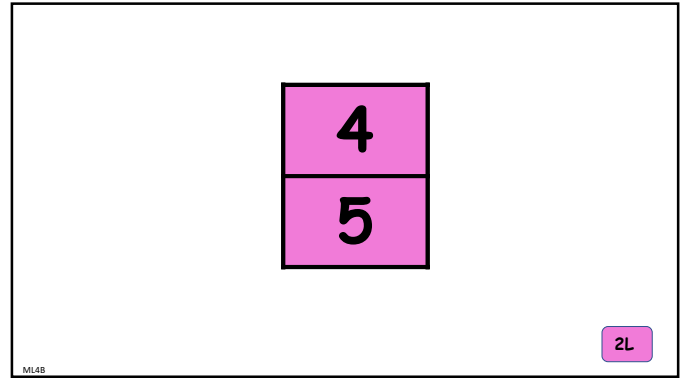
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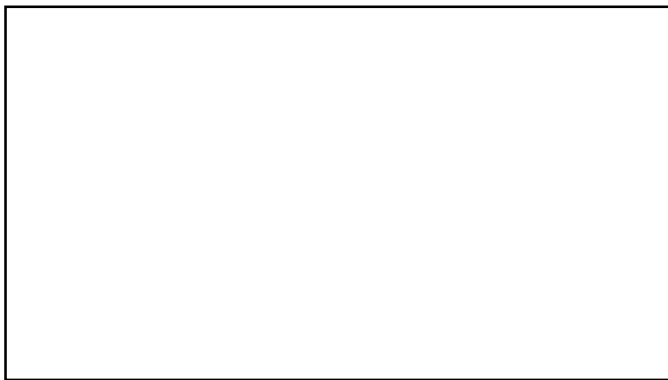
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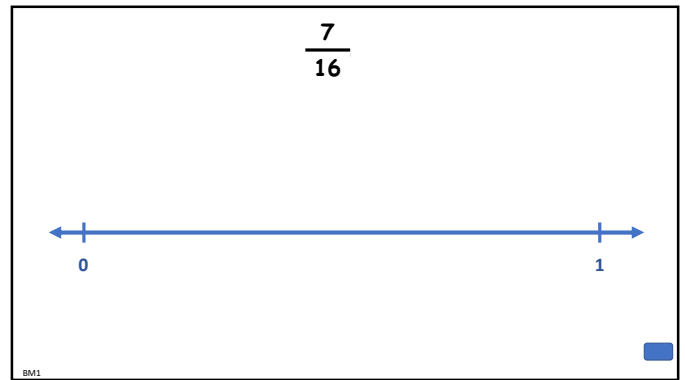
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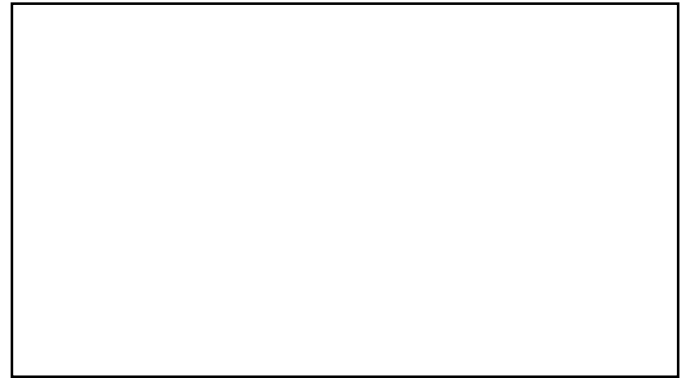
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$$\frac{4}{5} \quad \frac{8}{9}$$

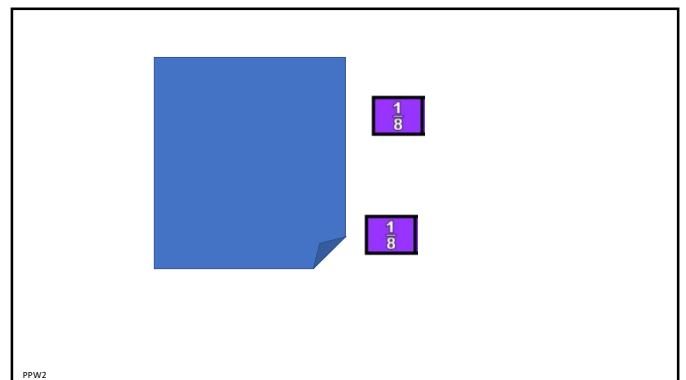
BM4
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26

$$\frac{3}{4}$$

PPW1
27



PPW2
28

$$\frac{4}{6} \quad \frac{1}{6}$$

PPW3
29