

USING THESE SLIDES.

Recall- 5 min activity to recall children's knowledge

Guided practice- work through together, teaching the new skills.

Intelligent practice- 10 minute independent fluency activity.

Dive deeper- These activities should take the longest. Children should think deeper and reason their answers. E.g. This is the answer because...
They may also prove their answer using a drawing, diagram etc.

RECALL

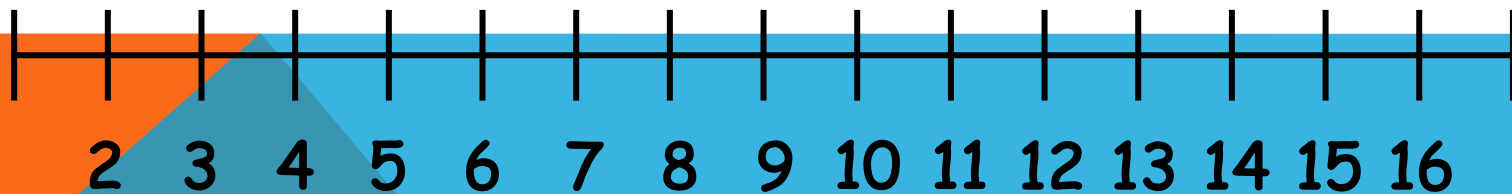
1) What is $18 - 8 =$

2) What is $14 - 6 =$

3) What number is missing?

$16, 15, \underline{\quad}, 13$

4) Use the number line $13 - 7 =$

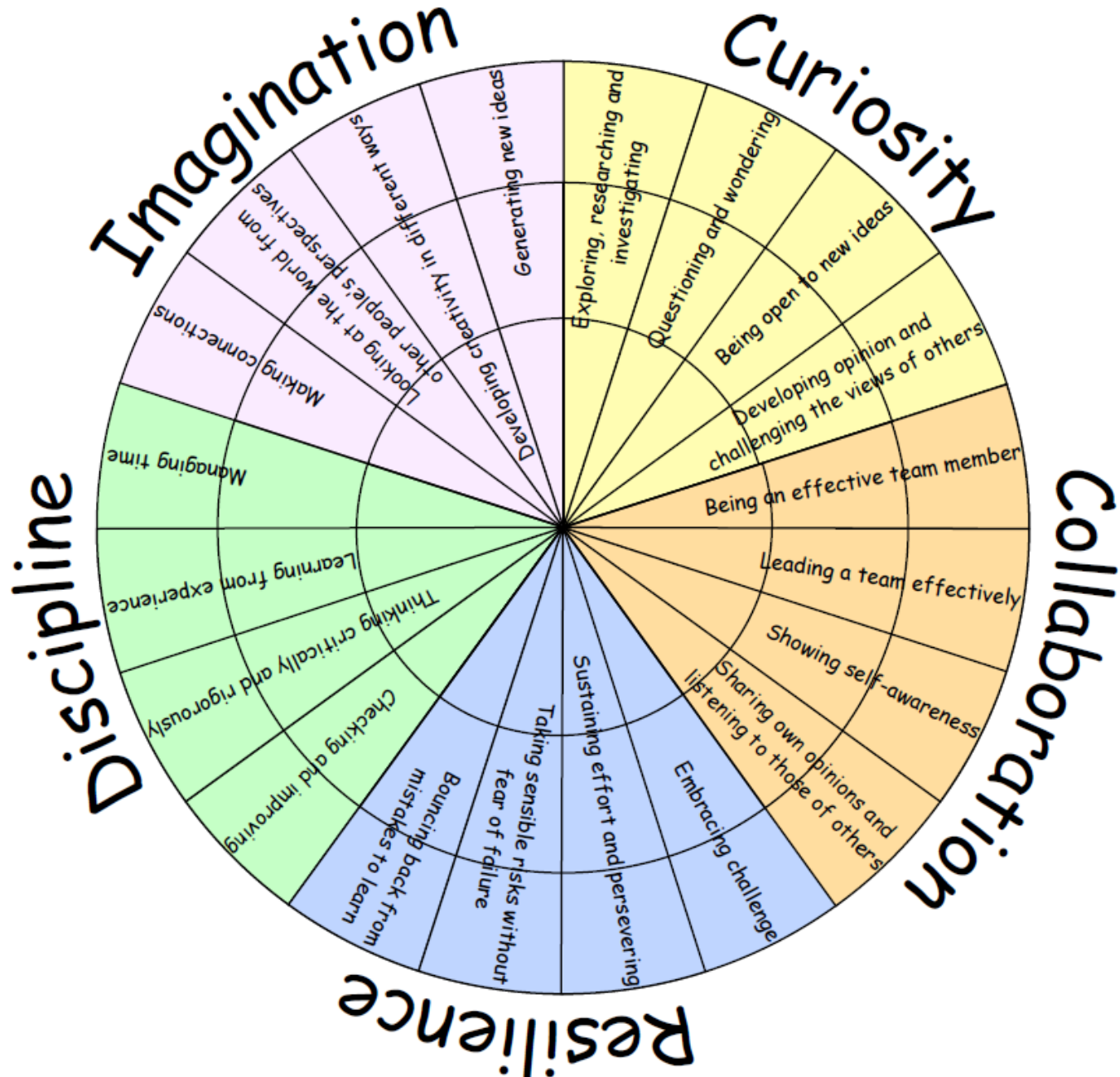


I CAN SUBTRACT, CROSSING TEN

ADDITION AND SUBTRACTION TO 20



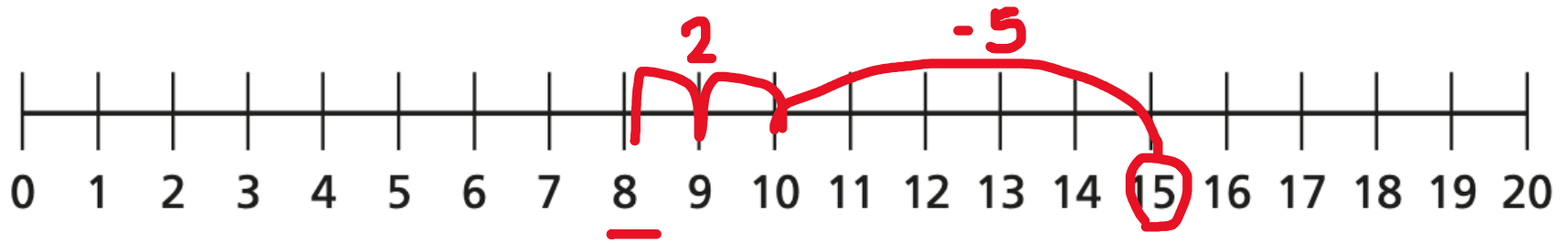
LEARNING HABITS?



Guided Practice: yesterday we subtracted by partitioning the second number to help us with doing bigger jumps on the number line.

$$\begin{array}{r} \text{Tens} \quad \text{ones} \quad \text{ones} \\ 15 - 7 = 8 \\ \hline \end{array}$$

5 2



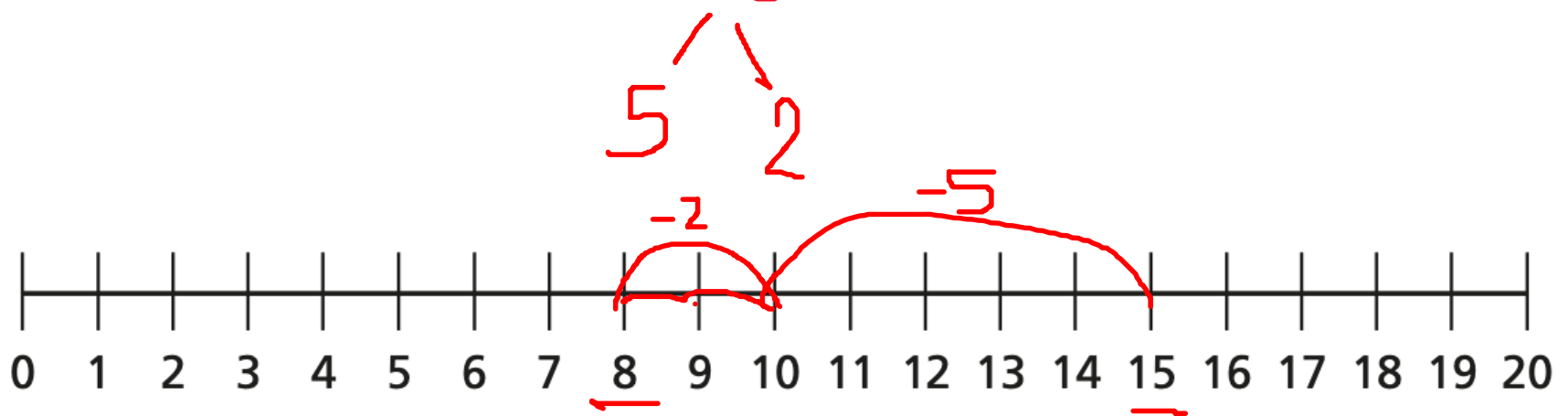
We want to jump to 10 so we need to get rid of the 5 in '15'.
To do this we need to partition the 7 into 5 + 2



Guided Practice: Today we're going to try and do bigger jumps on the number line

You might even challenge yourself to not use a number line at all.

$$\begin{array}{r} \text{Tens} \quad \text{ones} \quad \text{ones} \\ 1\cancel{5} - 7 = \underline{8} \end{array}$$



We need to get rid of the '5' ones in 15 by partitioning 7 into 5 + 2. This means we can do a jump of 5 to get us to 10 and then a final big jump of two.



Guided Practice: Today we're going to try and do bigger jumps on the number line

You might even challenge yourself to not use a number line at all.

$$\begin{array}{r} \text{Tens} \text{ ones} \quad \text{ones} \\ 15 - 7 = \underline{\quad} \\ \underline{\quad} \end{array}$$

Diagram illustrating the partitioning of 7 into 5 and 2. A red circle is drawn around the '5' in the number 15. A red arrow points from the '5' to the '5' in the number 7. Another red arrow points from the '2' in the number 7 to the right, indicating the final step of the calculation.

We need to get rid of the '5' ones in 15 by partitioning 7 into 5 + 2.

You might want to do $15 - 5 = 10$ and then subtract the final 2 using your knowledge of number bonds.

$$10 - 2 = 8$$

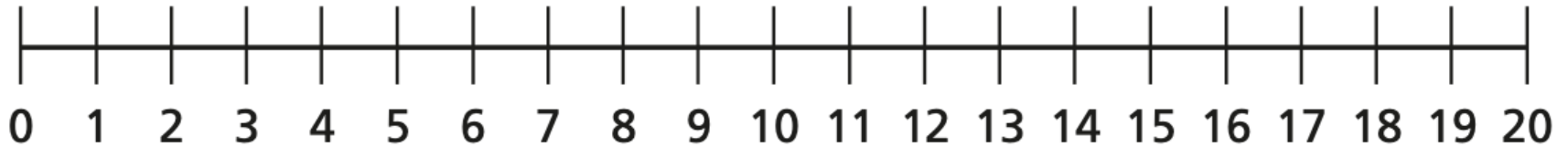


Guided Practice:

Have a go at this one, you may use the number line or your brain!

Tens ones ones

$$\begin{array}{c} \text{Tens} \quad \text{ones} \quad \text{ones} \\ 14 - 8 = \underline{\quad} \\ \text{red underline} \end{array}$$

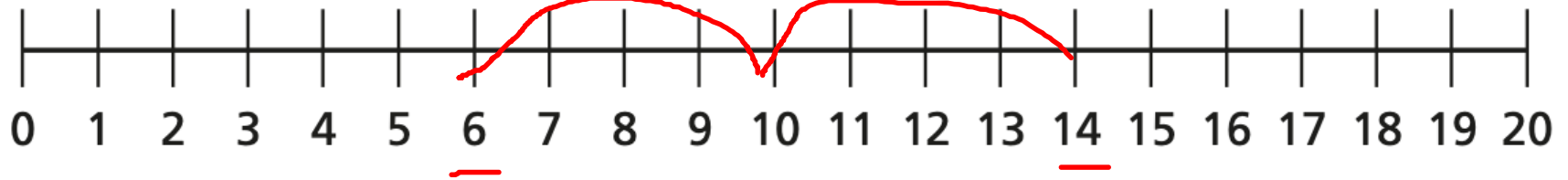


Guided Practice:

Have a go at this one, you may use the number line or your brain!

$$\begin{array}{r} \text{Tens} \quad \text{ones} \quad \text{ones} \\ 14 - 8 = 6 \\ \hline \end{array}$$

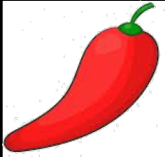
Handwritten annotations in red: a box around the 8, a box around the 4 in 14, and a box around the 4 in 4-4. A red arrow points from the 4 in 14 to the 8, and another red arrow points from the 4 in 4-4 to the 8.



Keep practicing with other calculations until you are confident enough for the task



INTELLIGENT PRACTICE

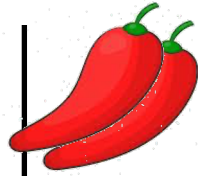


$$\begin{array}{r} 12 \\ \underline{} \end{array} - 4 = \underline{\quad}$$

4 is decomposed into 2 and 2.

$$\begin{array}{r} 12 \\ \underline{} \end{array} - 6 = \underline{\quad}$$

6 is decomposed into 2 and 4.

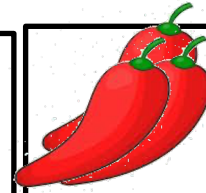


$$\begin{array}{r} 14 \\ \underline{} \end{array} - 6 = \underline{\quad}$$

6 is decomposed into 4 and 2.

$$\begin{array}{r} 14 \\ \underline{} \end{array} - 8 = \underline{\quad}$$

8 is decomposed into 4 and 4.

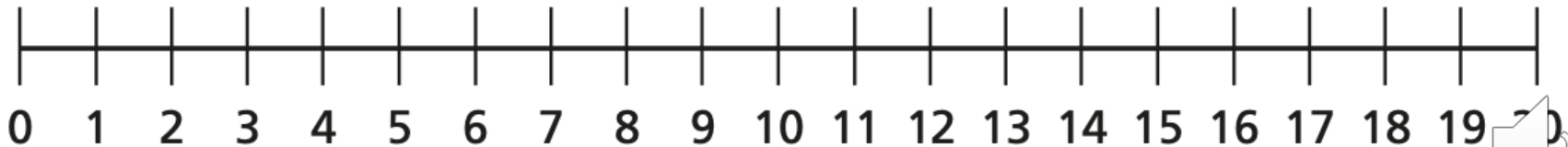


$$\begin{array}{r} 18 \\ \underline{} \end{array} - 8 = \underline{\quad}$$

8 is decomposed into 2 and 6.

$$\begin{array}{r} 18 \\ \underline{} \end{array} - 9 = \underline{\quad}$$

9 is decomposed into 3 and 6.



DIVE DEEPER 1:

Rosie is calculating $16 - 7$



Which of these methods is most helpful?
Why?

$$\begin{array}{r} 16 - 7 \\ \swarrow \quad \searrow \\ \textcircled{8} \quad \textcircled{8} \end{array}$$

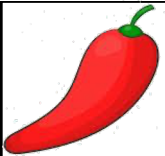
$$\begin{array}{r} 16 - 7 \\ \swarrow \quad \searrow \\ \textcircled{3} \quad \textcircled{4} \end{array}$$

$$\begin{array}{r} 16 - 7 \\ \swarrow \quad \searrow \\ \textcircled{6} \quad \textcircled{1} \end{array}$$

$$\begin{array}{r} 16 - 7 \\ \swarrow \quad \searrow \\ \textcircled{10} \quad \textcircled{6} \end{array}$$



INTELLIGENT PRACTICE

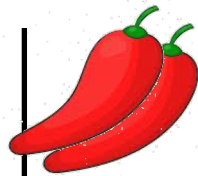


$$\begin{array}{r} 12 \\ - 4 \\ \hline \end{array} = 8$$

Diagram: The number 4 is circled in green. It branches into two smaller circles, each containing the number 2. The number 2 in the first circle has a red underline.

$$\begin{array}{r} 12 \\ - 6 \\ \hline \end{array} = 6$$

Diagram: The number 6 is circled in green. It branches into two smaller circles, one containing 2 and the other containing 4. The number 4 in the second circle has a red underline.

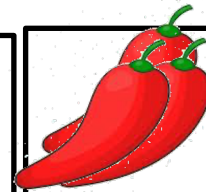


$$\begin{array}{r} 14 \\ - 6 \\ \hline \end{array} = 8$$

Diagram: The number 6 is circled in green. It branches into two smaller circles, one containing 4 and the other containing 2. The number 4 in the first circle has a red underline.

$$\begin{array}{r} 14 \\ - 8 \\ \hline \end{array} = 6$$

Diagram: The number 8 is circled in green. It branches into two smaller circles, each containing 4. The number 4 in the second circle has a red underline.

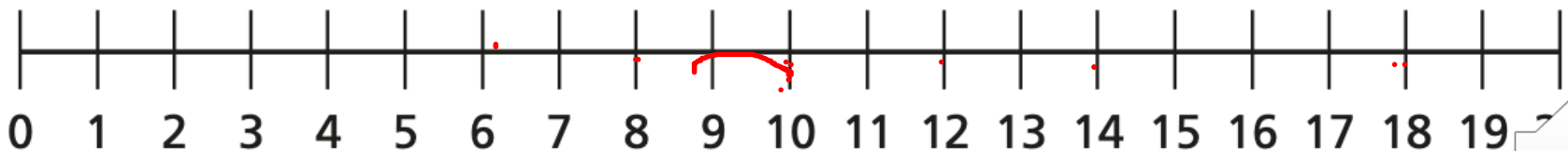


$$\begin{array}{r} 18 \\ - 8 \\ \hline \end{array} = 10$$

Diagram: The number 8 is circled in green. It branches into two smaller circles, one containing 8 and the other containing 0. The number 8 in the first circle has a red underline.

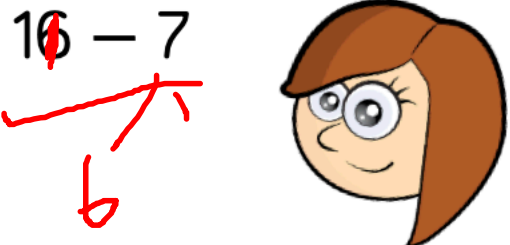
$$\begin{array}{r} 18 \\ - 9 \\ \hline \end{array} = 9$$

Diagram: The number 9 is circled in green. It branches into two smaller circles, one containing 8 and the other containing 1. The number 8 in the first circle has a red underline.

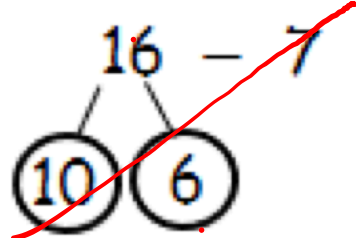
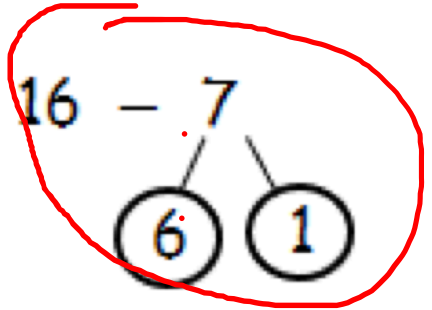
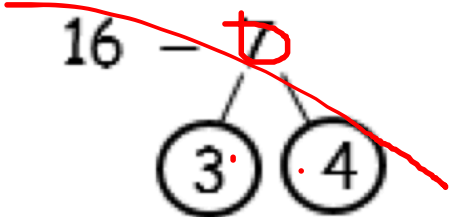
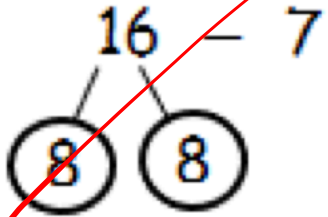


DIVE DEEPER 1:

Rosie is calculating $16 - 7$



Which of these methods is most helpful?
Why?



SELF-ASSESSMENT

L.O. To subtract crossing 10

21.01.2021

Some will even: subtract mentally by partitioning into smaller numbers.

Some will: Partition a number into smaller and easier parts..

Most will: Subtract using a number line.

All will: know that when we subtract our number becomes smaller

