## Year 4 Maths, 3/2/21

## Recall

- Look at this number line. Can you fill in the gaps? Use the pictures underneath the number line to help you.


Would it be possible to write the answers in more than one way?

## Recall answers



Would it be possible to write the answers in more than one way?
All the numbers greater than one could be written either as improper fractions or mixed numbers.
For example, this is the same as seven halves.

## Learning objective: I can count in fractions

- SOME WILL EVEN count in fractions in sequences with uneven steps
- SOME will give answers as improper fractions and mixed numbers
- MOST will count in fractions using number lines
- ALL will understand that it is possible to count in fractions


## Guided practice

- When we count in fractions, the denominator of the fraction tells us how many parts there are between the whole numbers.
- For example, to count in thirds: $\quad \begin{aligned} & \text { The denominator is 3, so there will } \\ & \text { be } 3 \text { parts between each whole } \\ & \text { number. }\end{aligned}$


Can you fill in the gaps on this number line? Is there more than one way to do this?

## Guided practice answers



Intelligent practice - one chilli

## Complete the number line.



Be careful with this first one remember that number lines don't always start at zero.
Use the bar model to help you here.

Intelligent practice - one chilli
answers

## Complete the number line.



Be careful with this first one remember that number lines don't always start at zero. Use the bar model to help you here.

Two chillies

Fill in the blanks using cubes or bar models to help you.

$$
\begin{aligned}
& \frac{7}{8} \frac{5}{8} \\
& +\frac{9}{8} \frac{10}{8} \frac{11}{8} \\
& \frac{1}{8} 1 \frac{1}{8} \frac{1}{8} \frac{1}{8}
\end{aligned}
$$



Two chillies answers

Fill in the blanks using cubes or bar models to help you.

$$
\begin{array}{lllllllllll}
\frac{7}{8} & \frac{8}{8} & \frac{9}{8} & \frac{10}{8} & \frac{11}{8} & \frac{6}{6} & \frac{7}{6} & \frac{8}{6} & \frac{9}{6} & \frac{10}{6} & \frac{11}{6} \\
\frac{12}{6} & \frac{13}{6} \\
\hline \frac{7}{8} & 1 & 1 \frac{1}{8} & 1 \frac{2}{8} & 1 \frac{3}{8} & 1 & 1 & 1 \frac{1}{6} & 1 \frac{2}{6} & 1 \frac{3}{6} & 1 \frac{4}{6}
\end{array} 1 \frac{5}{6} 202 \frac{1}{6}
$$

## Three chillies

## Write the next two fractions in each sequence.

a) $\frac{12}{7}, \frac{11}{7}, \frac{10}{7},-$,
b) $3 \frac{1}{3}, 3,2 \frac{2}{3}, \ldots$,
c) $\frac{4}{11}, \frac{6}{11}, \frac{8}{11}, —,-$

$$
\text { d) } 12 \frac{3}{5}, 13 \frac{1}{5}, 13 \frac{4}{5}, \ldots,
$$

Be extra careful with these!
Some are ascending, some are descending.
For $C$ and $D$ you will need to work out the difference between each step in the sequence to find the missing numbers.

## Three chillies answers

## Write the next two fractions in each sequence.

a) $\frac{12}{7}, \frac{11}{7}, \frac{10}{7}, \frac{9}{7}, \frac{8}{7}$
b) $3 \frac{1}{3}, 3,2 \frac{2}{3}, 2 \frac{1}{3}, 2$
c) $\frac{4}{11}, \frac{6}{11}, \frac{8}{11}, \frac{10}{11}, 1 \frac{1}{11} \quad$ d) $12 \frac{3}{5}, 13 \frac{1}{5}, 13 \frac{4}{5}, 14 \frac{2}{5}, 15$

Be extra careful with these!
Some are ascending, some are descending.
For $C$ and $D$ you will need to work out the difference
between each step in the sequence to find the missing
numbers.

## Dive deeper

Here is a number sequence.
$\frac{5}{12}, \frac{7}{12}, \frac{10}{12}, \frac{14}{12}, \frac{19}{12}$,
Which fraction would come next?
Can you write the fraction in more than one way?

Circle and correct the mistakes in the sequences.

$$
\begin{aligned}
& \frac{5}{12}, \frac{8}{12}, \frac{11}{12}, \frac{15}{12}, \frac{17}{12} \\
& \frac{9}{10}, \frac{7}{10}, \frac{6}{10}, \frac{3}{10}, \frac{1}{10}
\end{aligned}
$$

## Dive deeper

Here is a number sequence.

$$
\frac{5}{12}, \frac{7}{12}, \frac{10}{12}, \frac{14}{12}, \frac{19}{12}, \frac{25}{12}
$$

Which fraction would come next?
Can you write the fraction in more than one way?

The fractions are increasing by one more twelfth each time. The next fraction would be $\frac{25}{12}$

This is equivalent to $2 \frac{1}{12}$
Circle and correct the mistakes in the sequences.
$\frac{5}{12}, \frac{8}{12}, \frac{11}{12}, \frac{15}{12}, \frac{17}{12}$
$\frac{9}{10}, \frac{7}{10}, \frac{6}{10}, \frac{3}{10}, \frac{1}{10}$


## Self assessment - how did you do?

Did you work out the pattern in the dive deeper 1 question?

- SOME WILL EVEN count in fractions in sequences with uneven steps
- SOME will give answers as improper fractions and mixed numbers
- MOST will count in fractions using number lines
- ALL will understand that it is possible to count in fractions

