

Use this sheet **WHEN** you've completed the main worksheet and want a challenge. Remember to use your blue book if you have it to show your workings. The questions were resourced from White Rose Maths and Twinkl Diving into Mastery.

1. Here is a number sequence.

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

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

The pattern is increasing my 1 each time. The first jump is $\frac{2}{12}$, the next is $\frac{3}{12}$ and so on.

So from $\frac{19}{12}$, you will need to add $\frac{6}{12}$ so the next fraction is $\frac{25}{12}$. This could also be written as $2 \frac{1}{12}$

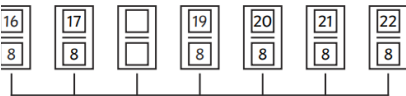
2. Circle and correct the mistakes in the sequences.

$\frac{5}{12}, \frac{8}{12}, \frac{11}{12}, \frac{15}{12}, \frac{17}{12}$

$\frac{9}{10}, \frac{7}{10}, \frac{6}{10}, \frac{3}{10}, \frac{1}{10}$

$\frac{5}{12}, \frac{8}{12}, \frac{11}{12}, \frac{14}{12}, \frac{17}{12}$
 $\frac{9}{10}, \frac{7}{10}, \frac{5}{10}, \frac{3}{10}, \frac{1}{10}$

3. The children have been asked to identify the missing fraction from the number line.
Check each of their answers. Who is correct? Who is incorrect? Explain your answers.



Todd: $\frac{18}{8}$
Amy: $2\frac{2}{8}$
Paolo: $1\frac{8}{8}$

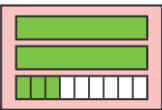
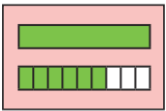
Correct answers are Todd and Amy.

Paolo is incorrect.

The fractions are increasing by $\frac{1}{8}$. Both Todd and Amy's fractions, represent $\frac{1}{8}$

Paolo cannot have a fraction that has $1\frac{8}{8}$ as this should be written as 2 wholes. 2 wholes still only make $\frac{16}{8}$ and not $\frac{18}{8}$

4. a) Look at these fraction cards. Organise them in descending order.

A:  B: $\frac{27}{9}$
C: $\frac{12}{9}$ D: 
E: 2 F: $2\frac{6}{9}$

a) B, F, A, E, D, C

b) The fractions are decreasing by three ninths each time.

c) $\frac{9}{9}$,  or 

The easiest way to solve this problem is to convert them all into ninths.

- b) Explain the pattern in this descending fraction number sequence.
c) What will the next card in the sequence be? Try to write it in more than one way and draw an image of this fraction.