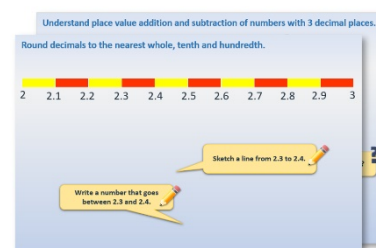


Year 5: Week 2, Day 3

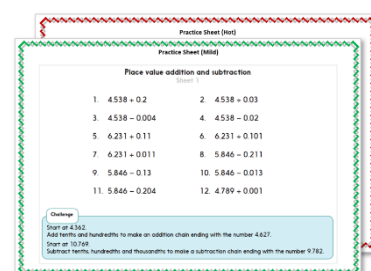
Use equivalence to compare and order fractions

Each day covers one maths topic. It should take you about 1 hour or just a little more.

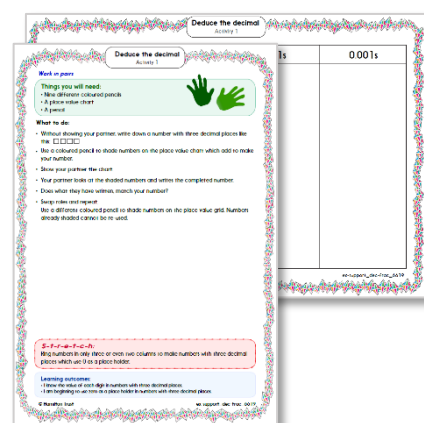
1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



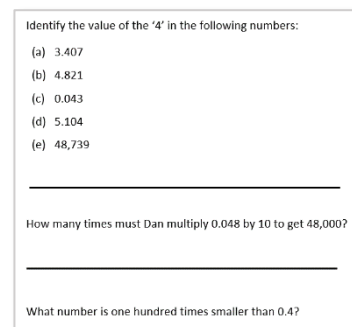
2. Tackle the questions on the **Practice Sheet**. There might be a choice of either **Mild** (easier) or **Hot** (harder)! Check the answers.



3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**



4. Have I mastered the topic? A few questions to **Check your understanding**. Fold the page to hide the answers!



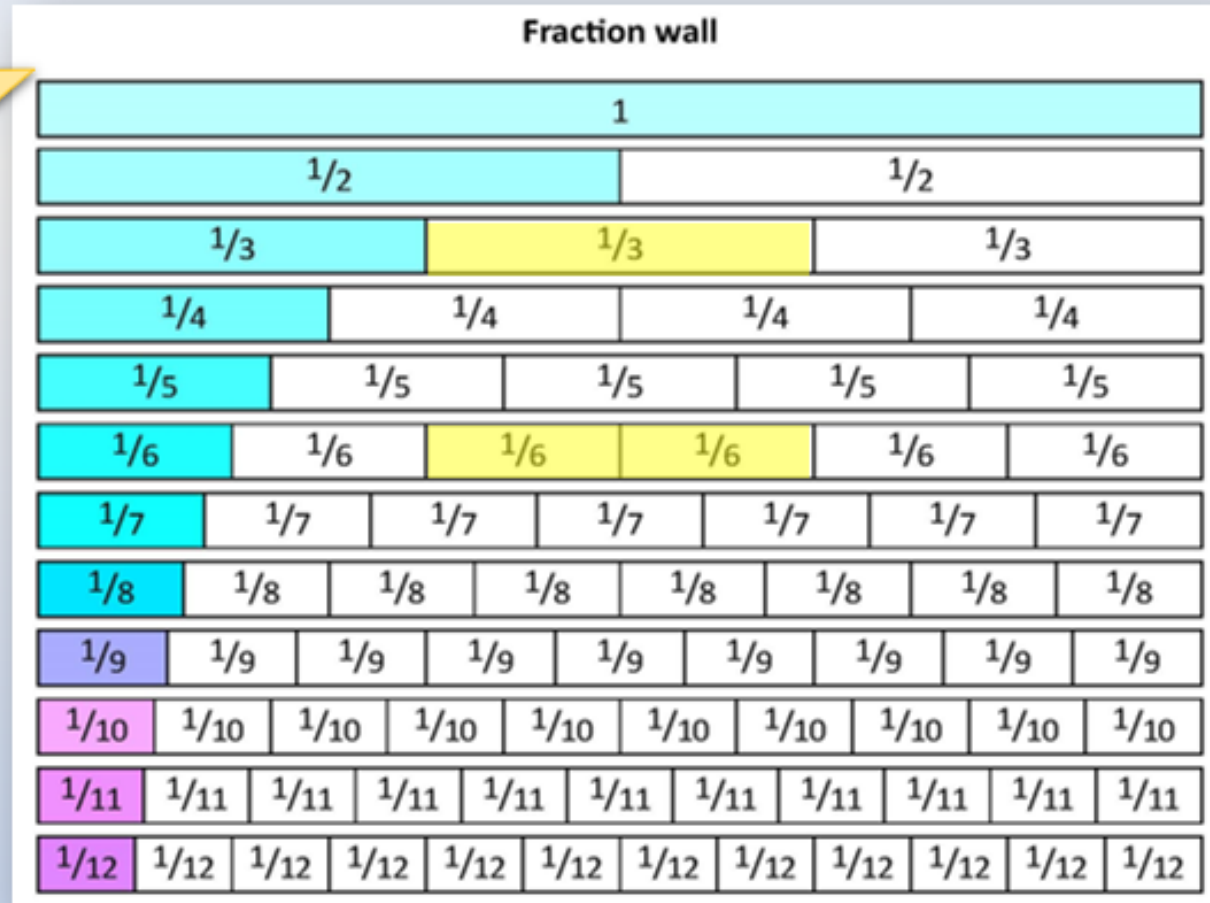
Learning Reminders

Comparing fractions, using equivalence.

Write 3 sentences to say what the *Fraction Wall* is and how we can use it.



Now write as many fractions equivalent to $\frac{1}{3}$, $\frac{1}{4}$ and $\frac{1}{5}$ as you can. One is shaded to get you started...



Answers

$$\frac{1}{3} = \frac{2}{6} = \frac{4}{12} \quad \frac{1}{4} = \frac{2}{8} = \frac{3}{12} \quad \frac{1}{5} = \frac{2}{10}$$

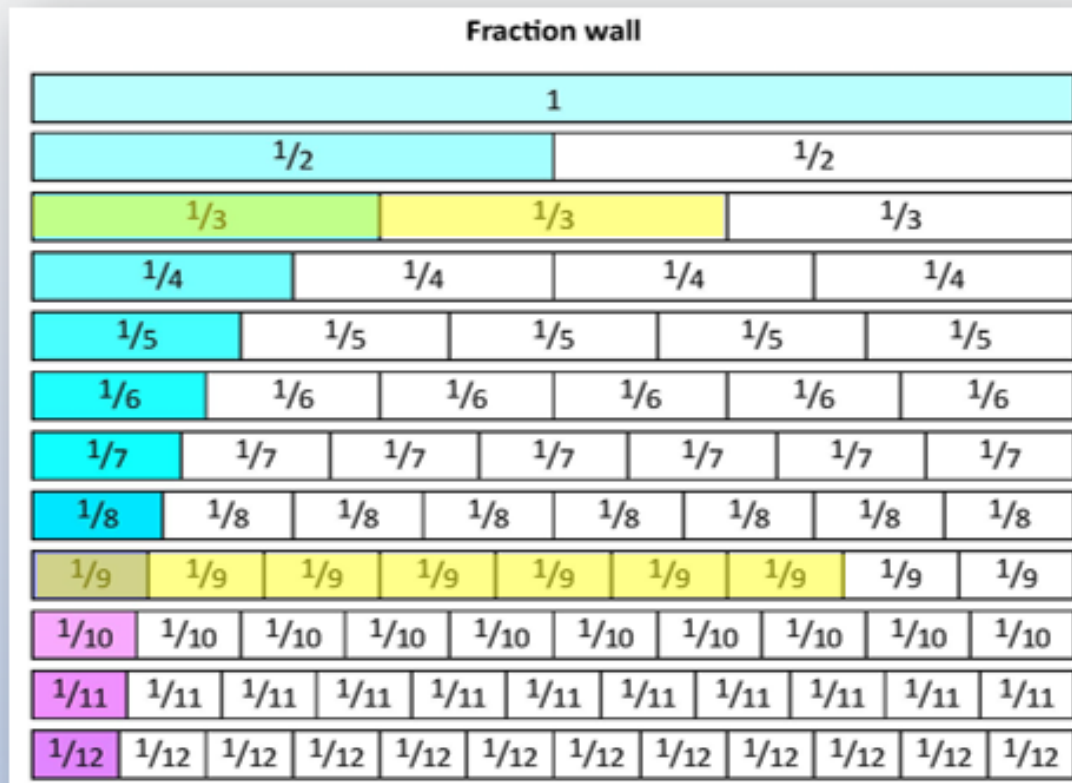
Learning Reminders

Comparing fractions, using equivalence.

Which is bigger?

$$\frac{2}{3} \quad \frac{7}{9}$$

Use the wall to see that $\frac{2}{3}$ are the same as $\frac{6}{9}$...



$$\frac{6}{9} < \frac{7}{9}$$

$$\text{so, } \frac{2}{3} < \frac{7}{9}$$

Learning Reminders

Comparing fractions, using equivalence.

Which is bigger?

$$\frac{7}{12} \quad \frac{3}{4}$$

Use the wall to see that $\frac{3}{4}$ are the same as $\frac{9}{12}$...

Fraction wall

1											
$\frac{1}{2}$						$\frac{1}{2}$					
$\frac{1}{3}$				$\frac{1}{3}$				$\frac{1}{3}$			
$\frac{1}{4}$			$\frac{1}{4}$			$\frac{1}{4}$			$\frac{1}{4}$		
$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$	
$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$	
$\frac{1}{7}$		$\frac{1}{7}$		$\frac{1}{7}$		$\frac{1}{7}$		$\frac{1}{7}$		$\frac{1}{7}$	
$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$	
$\frac{1}{9}$		$\frac{1}{9}$		$\frac{1}{9}$		$\frac{1}{9}$		$\frac{1}{9}$		$\frac{1}{9}$	
$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$	
$\frac{1}{11}$		$\frac{1}{11}$		$\frac{1}{11}$		$\frac{1}{11}$		$\frac{1}{11}$		$\frac{1}{11}$	
$\frac{1}{12}$		$\frac{1}{12}$		$\frac{1}{12}$		$\frac{1}{12}$		$\frac{1}{12}$		$\frac{1}{12}$	

$$\frac{7}{12} < \frac{9}{12}$$

$$\text{so, } \frac{7}{12} < \frac{3}{4}$$

Comparing fractions, using equivalence.

Which is bigger?

$$\frac{2}{5} \quad \frac{3}{10}$$

Use the wall to see that $\frac{2}{5}$ are the same as $\frac{4}{10}$...

Fraction wall

1											
$\frac{1}{2}$						$\frac{1}{2}$					
$\frac{1}{3}$				$\frac{1}{3}$				$\frac{1}{3}$			
$\frac{1}{4}$			$\frac{1}{4}$			$\frac{1}{4}$			$\frac{1}{4}$		
$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$	
$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$	
$\frac{1}{7}$		$\frac{1}{7}$		$\frac{1}{7}$		$\frac{1}{7}$		$\frac{1}{7}$		$\frac{1}{7}$	
$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$	
$\frac{1}{9}$		$\frac{1}{9}$		$\frac{1}{9}$		$\frac{1}{9}$		$\frac{1}{9}$		$\frac{1}{9}$	
$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$	
$\frac{1}{11}$		$\frac{1}{11}$		$\frac{1}{11}$		$\frac{1}{11}$		$\frac{1}{11}$		$\frac{1}{11}$	
$\frac{1}{12}$		$\frac{1}{12}$		$\frac{1}{12}$		$\frac{1}{12}$		$\frac{1}{12}$		$\frac{1}{12}$	

$$\frac{4}{10} > \frac{3}{10}$$

$$\text{so, } \frac{2}{5} > \frac{3}{10}$$

Learning Reminders

Comparing fractions, using equivalence.

$$\frac{3}{5} \quad \frac{7}{10} \quad \frac{8}{15}$$

What could we do to compare these three fractions?

Write them all as thirtieths.
The fraction wall can't help this time as there are no thirtieths on it!

$$\frac{3}{5} = \frac{18}{30}$$

Remember: Do the same multiplication, or division, to the numerator *and* denominator to create an equivalent fraction...

$$\frac{21}{30} > \frac{18}{30} > \frac{16}{30}$$

$$\frac{7}{10} > \frac{3}{5} > \frac{8}{15}$$

Practice Sheet Mild

Equivalent fractions

Use the fraction wall to help you join each fraction on the left to the equivalent fraction in its simplest form.

$$\frac{2}{8}$$

$$\frac{1}{2}$$

$$\frac{3}{6}$$

$$\frac{3}{9}$$

$$\frac{3}{12}$$

$$\frac{1}{3}$$

$$\frac{4}{12}$$

$$\frac{5}{10}$$

$$\frac{2}{3}$$

$$\frac{4}{8}$$

$$\frac{6}{8}$$

$$\frac{1}{4}$$

$$\frac{2}{6}$$

$$\frac{4}{6}$$

$$\frac{8}{12}$$

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

$$\frac{9}{12}$$

Challenge

Write some fractions which are equivalent to $\frac{1}{4}$ but not on the fraction wall.

Practice Sheet Mild

Ordering fractions

Write these fractions as $\frac{1}{6}$ s. Then write them in order, starting with the smallest first.

$$\frac{2}{3} \quad \frac{1}{2} \quad \frac{1}{3}$$

Write these fractions as $\frac{1}{10}$ s. Then write them in order, starting with the smallest first.

$$\frac{1}{2} \quad \frac{2}{5} \quad \frac{3}{5}$$

Write these fractions as $\frac{1}{12}$ s. Then write them in order, starting with the smallest first.

$$\frac{2}{3} \quad \frac{3}{4} \quad \frac{1}{4} \quad \frac{1}{3} \quad \frac{1}{6} \quad \frac{5}{6} \quad \frac{1}{2}$$

Practice Sheet Hot

Equivalent fractions

Ring all the fractions that are equivalent to $\frac{1}{4}$

$\frac{2}{8}$ $\frac{2}{7}$ $\frac{3}{12}$ $\frac{4}{20}$ $\frac{5}{20}$ $\frac{10}{30}$ $\frac{10}{40}$ $\frac{4}{16}$ $\frac{4}{100}$

Ring all the fractions that are equivalent to $\frac{1}{3}$

$\frac{3}{12}$ $\frac{3}{6}$ $\frac{2}{6}$ $\frac{4}{12}$ $\frac{4}{9}$ $\frac{10}{30}$ $\frac{3}{9}$ $\frac{5}{15}$ $\frac{6}{15}$

Ring all the fractions that are equivalent to $\frac{1}{5}$

$\frac{5}{15}$ $\frac{2}{10}$ $\frac{3}{15}$ $\frac{4}{20}$ $\frac{5}{20}$ $\frac{5}{100}$ $\frac{20}{100}$ $\frac{10}{50}$ $\frac{4}{25}$

Complete this list of fractions equivalent to $\frac{3}{4}$

$\frac{3}{4}$ $\frac{\square}{8}$ $\frac{\square}{12}$ $\frac{\square}{16}$ $\frac{\square}{20}$ $\frac{30}{\square}$ $\frac{\square}{60}$ $\frac{\square}{100}$ $\frac{21}{\square}$ $\frac{\square}{\square}$

Challenge 1

Ava says that she can write $\frac{1}{2}$, $\frac{3}{4}$, $\frac{2}{5}$ and $\frac{2}{3}$ as an equivalent number of fiftieths. Do you agree with her?

Challenge 2

Write at least 5 fractions which are equivalent to $\frac{2}{5}$.

Practice Sheet Hot

Comparing and ordering fractions

Compare these pairs of fractions. Write them as the same 'sort' of fractions (with the same denominator), then write $>$ or $<$ in between.

1. $\frac{2}{3}$ $\frac{3}{6}$

2. $\frac{2}{3}$ $\frac{2}{9}$

3. $\frac{3}{10}$ $\frac{1}{5}$

4. $\frac{3}{4}$ $\frac{7}{8}$

5. $\frac{5}{6}$ $\frac{11}{12}$

6. $\frac{7}{10}$ $\frac{3}{5}$

7. $\frac{1}{3}$ $\frac{5}{12}$

8. $\frac{2}{5}$ $\frac{7}{15}$

9. $\frac{7}{10}$ $\frac{13}{20}$

10. $\frac{1}{3}$ $\frac{4}{15}$

11. $\frac{1}{2}$ $\frac{2}{5}$

12. $\frac{2}{3}$ $\frac{4}{5}$

Write these groups of fractions as the same 'sort' of fractions. Then write each group in order from least to greatest.

13. $\frac{1}{2}$ $\frac{3}{4}$ $\frac{5}{8}$

14. $\frac{1}{2}$ $\frac{3}{5}$ $\frac{7}{10}$

15. $\frac{1}{3}$ $\frac{4}{15}$ $\frac{2}{5}$

16. $\frac{17}{20}$ $\frac{4}{5}$ $\frac{7}{10}$

Challenge

Create a group of four fractions with different denominators that can be re-written as the same 'sort'. Order them using $>$ or $<$ symbols.