



Colin and Coco's Deliberate Practice

Year 3 Unit 6

Fractions

Answers





Contents

This pack of deliberate practice is designed to be used flexibly to secure the manageable steps of this unit.

The table below indicates which activities are linked to which manageable steps.

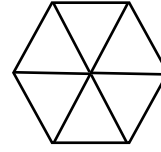
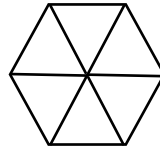
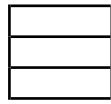
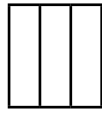
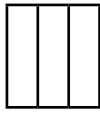
	Do It	Challenge It	Play It
Recognise and represent unit fractions	1		1
Recognise and represent non-unit fractions		1	1
Compare two proper fractions which have the same denominator	2		
Order a set of proper fractions which have the same denominator		2	
Compare two unit fractions	3		2
Order a set of unit fractions		3	
Compare two proper fractions which have the same numerator >1 (small denominator)	3		
Order a set of proper fractions which have the same numerator >1 (small denominator)		4	
Recognise and show equivalent proper fractions (denominators multiples of each other)	4		4



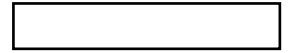
Do It 1

Represent in different ways:

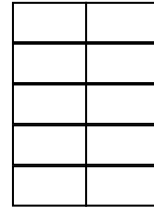
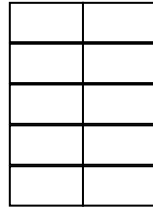
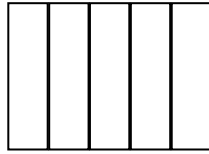
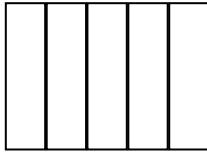
$\frac{1}{3}$



1 out of 3 equal parts shaded



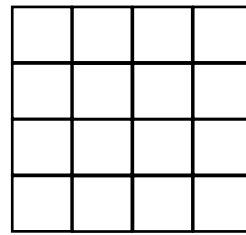
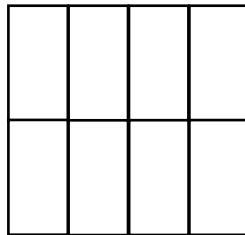
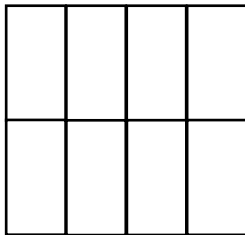
$\frac{1}{5}$



1 out of 5 equal parts shaded



$\frac{1}{8}$

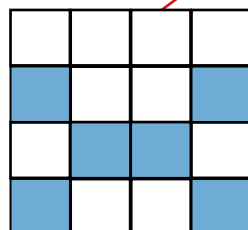
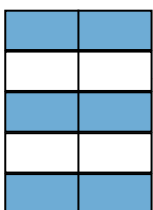
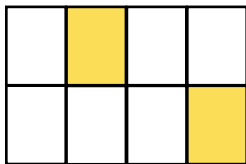


1 out of 8 equal parts shaded

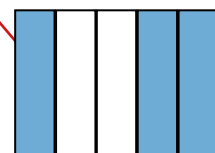
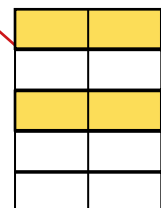
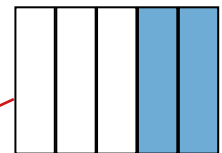


Challenge It 1

Match the representation to the fraction.
Find the missing buddies.



$\frac{2}{3}$
$\frac{2}{5}$
$\frac{2}{8}$
$\frac{3}{5}$
$\frac{3}{8}$





Shade Fractions Game

Play It 1

You need:

1 - 6 dice

Fraction Template each

To play:

Take it in turns to roll the dice and find the fraction in the table.

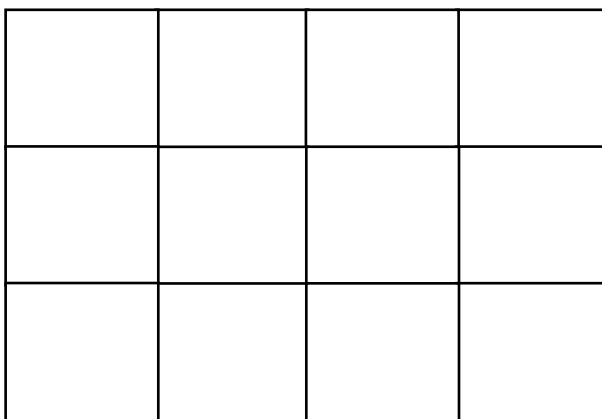
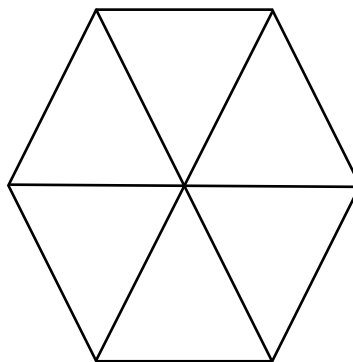
Shade that fraction of one of your shapes on your Fraction Template.

If you cannot shade the fraction play passes to the next player.

To win:

The winner is the first player to shade all their shapes.

Throw	Fraction
1	$\frac{1}{3}$
2	$\frac{1}{6}$
3	$\frac{2}{3}$
4	$\frac{2}{6}$
5	$\frac{3}{6}$
6	$\frac{1}{2}$





Do It 2

Insert < or > to make the statements true.

$$\frac{1}{8} \text{ } \odot \text{ } \frac{4}{8}$$

$$\frac{1}{5} \text{ } \odot \text{ } \frac{4}{5}$$

$$\frac{4}{7} \text{ } \odot \text{ } \frac{3}{7}$$

$$\frac{3}{8} \text{ } \odot \text{ } \frac{7}{8}$$

$$\frac{3}{5} \text{ } \odot \text{ } \frac{2}{5}$$

$$\frac{1}{7} \text{ } \odot \text{ } \frac{7}{7}$$

$$\frac{2}{8} \text{ } \odot \text{ } \frac{4}{8}$$

$$\frac{1}{5} \text{ } \odot \text{ } \frac{2}{5}$$

$$\frac{6}{7} \text{ } \odot \text{ } \frac{4}{7}$$

$$\frac{7}{8} \text{ } \odot \text{ } \frac{6}{8}$$

$$\frac{4}{5} \text{ } \odot \text{ } \frac{3}{5}$$

$$\frac{3}{7} \text{ } \odot \text{ } \frac{2}{7}$$

Challenge It 2

Choose three fractions from the list and put them in order of size from smallest to largest.

Complete this in as many ways as possible.
How will you know you have found them all?

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

$$\frac{5}{8}$$

$$\frac{1}{8}$$

$$\frac{7}{8}$$

$$\frac{3}{8}$$

10 possible sets,
numerators
getting larger.



Compare Unit Fractions Game

Play It 2

You need:

A set of Unit Fraction cards

To play:

Shuffle the cards and deal 7 to each player.

Players look at their cards.

Player A places a fraction face up on the table. Player B tries to play a larger fraction card. If they succeed they win the two cards. (This is called winning a trick!)

If they play a smaller fraction then Player A wins the trick.

Whoever wins the trick plays the first card in the next round.

If the fractions are the same, no one wins the trick and the same player leads again.

Play continues until all cards have been played.

To win:

The winner is the player with the most tricks.

$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{4}$
---------------	---------------	---------------	---------------	---------------	---------------

$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{6}$
---------------	---------------	---------------	---------------	---------------	---------------

$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{7}$	$\frac{1}{7}$	$\frac{1}{7}$	$\frac{1}{8}$
---------------	---------------	---------------	---------------	---------------	---------------

$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{10}$	$\frac{1}{10}$
---------------	---------------	---------------	---------------	----------------	----------------



Do It 3

Insert < or > to make the statements true.

$$\frac{1}{8} \text{ } \textcircled{<} \text{ } \frac{1}{5}$$

$$\frac{1}{8} \text{ } \textcircled{<} \text{ } \frac{1}{4}$$

$$\frac{4}{7} \text{ } \textcircled{>} \text{ } \frac{4}{8}$$

$$\frac{1}{7} \text{ } \textcircled{<} \text{ } \frac{1}{6}$$

$$\frac{3}{5} \text{ } \textcircled{>} \text{ } \frac{3}{8}$$

$$\frac{3}{5} \text{ } \textcircled{<} \text{ } \frac{3}{4}$$

$$\frac{1}{5} \text{ } \textcircled{<} \text{ } \frac{1}{4}$$

$$\frac{2}{7} \text{ } \textcircled{<} \text{ } \frac{2}{3}$$

$$\frac{7}{8} \text{ } \textcircled{>} \text{ } \frac{7}{10}$$

$$\frac{1}{3} \text{ } \textcircled{>} \text{ } \frac{1}{6}$$

$$\frac{4}{5} \text{ } \textcircled{>} \text{ } \frac{4}{7}$$

$$\frac{5}{7} \text{ } \textcircled{>} \text{ } \frac{5}{9}$$

Challenge It 3

Choose four fractions from the list and put them in order of size from largest to smallest.

Complete this in as many ways as possible.
How will you know you have found them all?

$$\frac{1}{5}$$

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

$$\frac{1}{7}$$

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

$$\frac{1}{8}$$

$$\frac{1}{6}$$

10 possible sets,
denominators
getting larger.



Order Unit Fractions Game

Play It 3

You need:

A set of Unit Fraction cards (from Play It 2.)

To play:

Shuffle the cards and deal 7 to each player. Put the rest in a deck face down.

Players look at their cards.

A card is turned over from the deck.

Player A places a fraction face up on the table that is greater than the card from the deck.

Player B tries to play a fraction that lies between the two fractions. If they succeed they win the three cards.

If they cannot play a fraction then Player A wins the 2 cards.

Play continues until a player has used all their cards.

To win:

The winner is the player who has won the most cards.

$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{4}$
---------------	---------------	---------------	---------------	---------------	---------------

$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{6}$
---------------	---------------	---------------	---------------	---------------	---------------

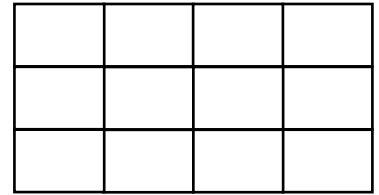
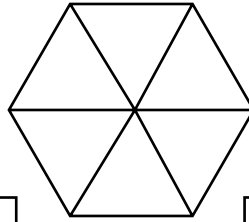
$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{7}$	$\frac{1}{7}$	$\frac{1}{7}$	$\frac{1}{8}$
---------------	---------------	---------------	---------------	---------------	---------------

$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{10}$	$\frac{1}{10}$
---------------	---------------	---------------	---------------	----------------	----------------

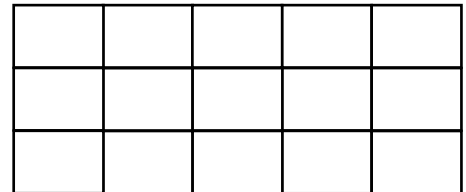
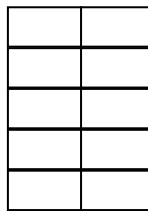
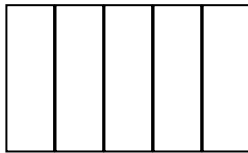


Do It 4

Shade to show the given fraction and write the equivalent fractions.



$$\frac{2}{3} = \frac{\boxed{4}}{\boxed{6}} = \frac{\boxed{8}}{\boxed{12}}$$



$$\frac{3}{5} = \frac{\boxed{6}}{\boxed{10}} = \frac{\boxed{9}}{\boxed{15}}$$

Challenge It 4

Find the missing digits so that each set of fractions are in order from largest to smallest. Solve them in several different ways.

Possible solution

$$\frac{3}{\boxed{8}}$$

$$\frac{\boxed{3}}{\boxed{7}}$$

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

$$\frac{4}{\boxed{9}}$$

$$\frac{\boxed{4}}{7}$$

$$\frac{4}{\boxed{5}}$$

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

$$\frac{1}{\boxed{6}}$$

$$\frac{1}{1\boxed{0}}$$

Solve them altogether using the digits 0 - 9 once each.



Equivalent Fractions Game

Play It 4

You need:

A 1 - 6 dice

Counters for each player or coloured pencils.

To play:

Players take it in turns to roll the dice twice to get a numerator and denominator.

If you roll two numbers the same, roll again.

They then sketch to show an equivalent fraction. Cover the numerator and denominator of the new fraction anywhere on the board.

To win:

The winner is the first player to connect five squares, horizontally, vertically or diagonally.

3	2	6	24	12	8	12	30
8	10	3	16	9	15	10	6
12	2	5	30	18	3	12	2
6	15	4	3	24	6	2	18
20	8	10	2	36	15	12	8
3	4	9	20	8	2	3	10
16	20	30	12	10	16	4	18
12	24	5	2	20	8	36	5