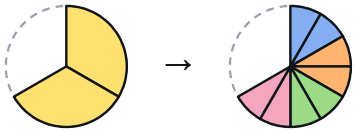
Names (pair) _____ Date _____

Dividing a Fraction: Smaller Pieces

Example



Two thirds can't be shared into 4 equal parts. So we **cut each third into 4 smaller pieces:** $\frac{2}{3} = \frac{8}{12}$.

Each of the four children gets two pieces of one colour.

$$\frac{2}{3} \div 4 = \frac{8}{12} \div 4 = \frac{2}{12} = \frac{1}{6}$$

$$\frac{2}{3} \div 4 = \frac{1}{4} \times \frac{2}{3} = \frac{2}{12} = \frac{1}{6}$$

Remember

Dividing by 4 is the same as taking $\frac{1}{4}$: $\frac{2}{3} \div 4 = \frac{1}{4} \times \frac{2}{3}$. To divide a fraction by a whole number, **multiply the denominator by that number**.

1 ON YOUR OWN Cut the pieces into smaller ones, then share.

$\frac{1}{2} \div 3 = \frac{\square}{6} \div 3 = \frac{\square}{6}$

$\frac{2}{3} \div 3 = \frac{\square}{9} \div 3 = \frac{\square}{9}$

$\frac{3}{4} \div 2 = \frac{\square}{8} \div 2 = \frac{\square}{8}$

$\frac{1}{3} \div 2 = \frac{\square}{6} \div 2 = \frac{\square}{6}$

$\frac{2}{5} \div 3 = \frac{\square}{15} \div 3 = \frac{\square}{15}$

$\frac{3}{5} \div 2 = \frac{\square}{10} \div 2 = \frac{\square}{10}$

2 ON YOUR OWN Divide. Simplify if you can.

$\frac{5}{8} \div 2 = \frac{\square}{\square}$

$\frac{7}{10} \div 7 = \frac{\square}{\square}$

$\frac{2}{3} \div 6 = \frac{\square}{\square}$

$\frac{9}{10} \div 3 = \frac{\square}{\square}$

$\frac{3}{8} \div 4 = \frac{\square}{\square}$

$\frac{4}{5} \div 8 = \frac{\square}{\square}$

Names (group) _____ Date _____

3 IN PAIRS **Two ways.** One student cuts into smaller pieces, the other multiplies by $\frac{1}{n}$. Compare and swap roles.

Division	Smaller pieces	Multiplying
$\frac{3}{4} \div 5$	$\frac{\square}{\square} \div 5 = \frac{\square}{\square}$	$\frac{1}{5} \times \frac{3}{4} = \frac{\square}{\square}$
$\frac{2}{7} \div 3$	$\frac{\square}{\square} \div 3 = \frac{\square}{\square}$	$\frac{1}{3} \times \frac{2}{7} = \frac{\square}{\square}$
$\frac{5}{6} \div 2$	$\frac{\square}{\square} \div 2 = \frac{\square}{\square}$	$\frac{1}{2} \times \frac{5}{6} = \frac{\square}{\square}$
$\frac{4}{9} \div 3$	$\frac{\square}{\square} \div 3 = \frac{\square}{\square}$	$\frac{1}{3} \times \frac{4}{9} = \frac{\square}{\square}$

4 IN A GROUP **Right or wrong?** Circle. If it is wrong, write the correct calculation.

$\frac{3}{5} \div 2 = \frac{3}{10}$ **right** / **wrong**

Correction: _____

$\frac{2}{3} \div 4 = \frac{8}{3}$ **right** / **wrong**

Correction: _____

$\frac{6}{7} \div 3 = \frac{2}{7}$ **right** / **wrong**

Correction: _____

$\frac{3}{4} \div 3 = \frac{1}{12}$ **right** / **wrong**

Correction: _____

★ ON YOUR OWN **Exit card.** $\frac{3}{5} \div 4 = \frac{\square}{\square}$