Year 3: Week 3, Day 2

Use a fraction wall to order groups of 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.


4. Think you’ve cracked it? Whizzed through the Practice Sheets? Have a go at the Investigation...
Compare and order fractions.

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Which shaded fraction is largest: \(\frac{2}{3}\), \(\frac{4}{5}\) or \(\frac{5}{7}\)?

Writing largest first, we can see that:

\[\frac{4}{5} > \frac{5}{7} > \frac{2}{3}\]
### Compare and order fractions.

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Have a go at writing these fractions in order, smallest first:

\(\frac{1}{2}\) \(\frac{3}{8}\) \(\frac{2}{5}\)
### Compare and order fractions.

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Write these fractions in order, **smallest first:**

\[
\frac{1}{2} \quad \frac{3}{8} \quad \frac{2}{5}
\]

Remember, that the fraction with the smallest numerator and denominator could be the largest in size!

\[
\frac{3}{8} \quad < \quad \frac{2}{5} \quad < \quad \frac{1}{2}
\]
Practice Sheet for All
Comparing fractions

1. Write each set of three fractions in order, smallest to largest. Use the fraction wall to help you.

\[
\begin{align*}
\frac{1}{2} & \quad \frac{2}{3} & \quad \frac{1}{4} \\
\frac{1}{3} & \quad \frac{2}{3} & \quad \frac{1}{8} \\
\frac{1}{8} & \quad \frac{1}{2} & \quad \frac{2}{5}
\end{align*}
\]

\[
\begin{align*}
\frac{1}{3} & \quad \frac{1}{4} & \quad \frac{1}{6} \\
\frac{1}{7} & \quad \frac{1}{8} & \quad \frac{1}{5} \\
\frac{1}{2} & \quad \frac{2}{7} & \quad \frac{3}{4}
\end{align*}
\]

2. Write < or > or = between each pair of fractions.

\[
\begin{align*}
\frac{1}{2} & \quad \frac{1}{4} & \quad \frac{1}{6} & \quad \frac{1}{8} \\
\frac{2}{5} & \quad \frac{2}{7} & \quad \frac{1}{2} & \quad \frac{4}{8}
\end{align*}
\]

Challenge

Write these groups of fractions in order, smallest first.

1. \[\frac{1}{2}, \frac{1}{4}, \frac{1}{3}\]
2. \[\frac{2}{3}, \frac{1}{2}, \frac{2}{5}\]
3. \[\frac{1}{8}, \frac{1}{5}, \frac{1}{7}\]
4. \[\frac{3}{4}, \frac{7}{8}, \frac{4}{5}\]
Practice Sheet Answers

Comparing fractions

1.

\[
\begin{array} {ccc}
\frac{1}{4} & \frac{1}{2} & \frac{2}{3} \\
\frac{1}{8} & \frac{1}{3} & \frac{2}{3} \\
\frac{1}{8} & \frac{2}{5} & \frac{1}{2}
\end{array}
\]

\[
\begin{array} {ccc}
\frac{1}{6} & \frac{1}{4} & \frac{1}{3} \\
\frac{1}{8} & \frac{1}{7} & \frac{1}{5} \\
\frac{2}{7} & \frac{1}{2} & \frac{3}{4}
\end{array}
\]

2.

\[
\frac{1}{2} > \frac{1}{4} \quad \frac{1}{6} > \frac{1}{8}
\]

\[
\frac{2}{3} > \frac{2}{7} \quad \frac{1}{2} = \frac{4}{8}
\]

Challenge

1. \(\frac{1}{4}, \frac{1}{3}, \frac{1}{2}\)  
   2. \(\frac{2}{5}, \frac{1}{2}, \frac{2}{3}\)

3. \(\frac{1}{8}, \frac{1}{7}, \frac{1}{5}\)  
   4. \(\frac{3}{4}, \frac{4}{5}, \frac{7}{8}\)
**A Bit Tricky?**

**The half family**

*Follow-up questions*

**Focus of activity:** Finding fractions which are equivalent to one half.

Colour in any fractions that reach exactly the same distance across the wall as $\frac{1}{2}$.

HINT: Not every row will have a fraction that is exactly equivalent to $\frac{1}{2}$.

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Investigation
Fraction bets!

1. Spread out the fraction cards. We will be placing all these fractions along a line. Before we do that, place your bet on which two will be closest together.

2. Talk about which two fractions are closest together. Which two fractions are nearly the same amount?

3. Write your fraction bet down.

4. Use the line. Mark the different fractions on it. Make sure you mark each one in the correct place.

5. Continue until it is clear which fractions are really close to each other on the line.

6. Whose bet was correct?

I bet that $\frac{3}{4}$ and $\frac{5}{6}$ are closest together.

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Investigation
Fraction bets!

\[
\frac{1}{8} \quad \frac{3}{8} \quad \frac{5}{8} \quad \frac{7}{8} \quad \frac{1}{6} \quad \frac{5}{6} \quad \frac{1}{4} \quad \frac{3}{4} \quad \frac{1}{3} \quad \frac{2}{3} \quad \frac{1}{2}
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\[
0 \quad \frac{1}{2} \quad 1
\]
**Investigation**

**Fraction bets!**

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