

Equal parts and fractions

Teacher guide | choose support, core or challenge

Establish the whole, divide it into equal parts and identify how many parts are selected. Equal-sized wholes are essential when comparing the fraction bars in this activity.

Prepare

Use counters or base-ten materials for number work; use same-sized paper bars for fractions. Print at Actual size on A4 paper. The original two-page resource is included at the end of this pack.

Teach and discuss

Model one example, ask the learner to explain a choice, then give time for independent or paired practice. These are options within a lesson, not a requirement to finish every page.

Choose the level

Page 2 provides a supported starting point. Pages 5-6 contain the original core activity and teacher notes. Page 3 adds reasoning and challenge; use it when the underlying idea is understood.

Review

Use the answer notes on page 4 and ask for an explanation or model. Offer drawing, discussion and usual communication tools. Choose the level by understanding rather than a fixed label for the child.

Equal parts and fractions

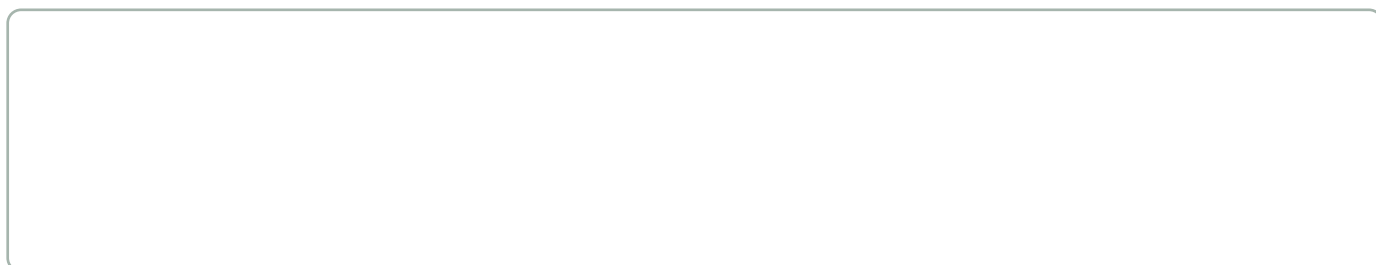
Supported activity | use materials and explain

Name: _____ Date: _____

1. Draw a bar in 2 equal parts. Shade 1 part and name the fraction.



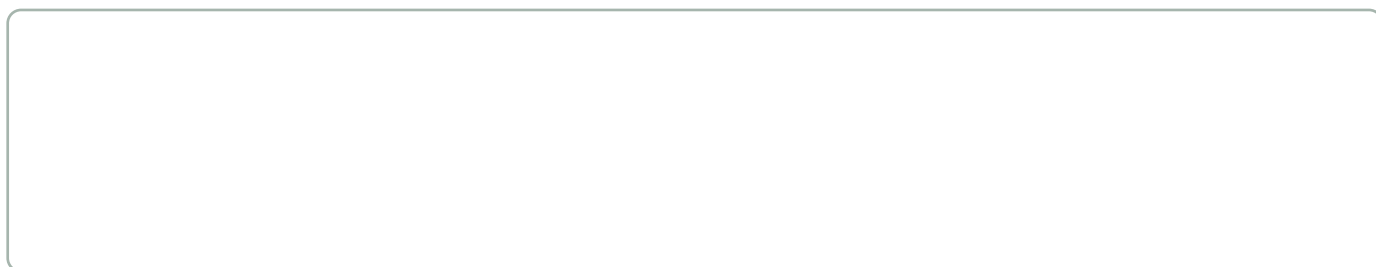
2. Draw a same-sized bar in 4 equal parts. Shade 1 part.



3. Show $\frac{2}{4}$ on a bar. Compare it with $\frac{1}{2}$ of an equal-sized bar.



4. A bar has 4 equal parts and 3 are shaded. Name the shaded and unshaded fractions.



Equal parts and fractions

Challenge activity | show your reasoning

Name: _____ Date: _____

1. Show why $\frac{2}{3}$ and $\frac{4}{6}$ are equivalent using equal-sized bars.

2. Nia says $\frac{1}{4}$ is greater than $\frac{1}{2}$ because 4 is greater than 2. Explain.

3. Two equal-sized bars show $\frac{3}{4}$ and $\frac{2}{3}$. Which is greater? Show your reasoning.

4. Could half of one whole be greater than three quarters of another whole? Explain.

Equal parts and fractions

Teacher answers | accept other valid explanations

Supported activity

1. $\frac{1}{2}$.
2. $\frac{1}{4}$. Each quarter is smaller than each half when the wholes are equal.
3. They show the same amount: $\frac{2}{4} = \frac{1}{2}$.
4. Shaded $\frac{3}{4}$; unshaded $\frac{1}{4}$.

Challenge activity

1. Divide every third into two equal parts. Two shaded thirds become four shaded sixths.
2. For equal-sized wholes, each quarter is smaller than each half. The denominator counts equal parts.
3. $\frac{3}{4}$ is greater. For example, use twelfths: $\frac{9}{12}$ is greater than $\frac{8}{12}$.
4. Yes, if the first whole is sufficiently larger. For example, half of 12 counters is 6, while three quarters of 4 counters is 3.

Equal parts and fractions

Suggested: Years 3-4 | Pupil page

Shade equal-part bars, compare fractions and explain a decision.

Name: _____ Date: _____

1. Shade 1 of the 2 equal parts. Write the fraction: ____

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2. Shade 3 of the 4 equal parts. Write the fraction: ____

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3. Shade 2 of the 3 equal parts. Write the fraction: ____

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4. Shade 4 of the 6 equal parts. Write the fraction: ____

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5. On equal-sized wholes, which is greater: $\frac{1}{2}$ or $\frac{1}{4}$? Explain.

6. Can $\frac{2}{3}$ and $\frac{4}{6}$ describe the same amount? Use the bars to explain.

Equal parts and fractions | Teacher notes

Suggested: Years 3-4 | Teacher page

Purpose and use

Shade equal-part bars, compare fractions and explain a decision.

Teaching notes

The bars on this page have the same whole length. Explicitly discuss equal wholes when comparing fractions.

Accept clear shading or a reasoned explanation. Denominator counts all equal parts, not just the unshaded ones.

Answers / suggested responses

1. $\frac{1}{2}$, with 1 section shaded.
2. $\frac{3}{4}$, with 3 sections shaded.
3. $\frac{2}{3}$, with 2 sections shaded.
4. $\frac{4}{6}$, with 4 sections shaded.
5. $\frac{1}{2}$ is greater for equal-sized wholes. A half contains two quarters.
6. Yes. Dividing each third into two equal parts makes sixths, so $\frac{2}{3} = \frac{4}{6}$.

Print and adapt

Print the pupil page only if you do not need these notes. Use A4 paper. Provide appropriate help, access tools or a spoken response where useful. Suggested year or grade ranges are starting points, not a statement of curriculum alignment.

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