

Comparing fractions with the same bottom number

CURRICULUM ALIGNMENT

NUM.FRC.3a compare and express in equivalent terms; and order fractions.

INTERACTIVES Fraction Strips · challenge, display

WHAT THIS LESSON TEACHES

When two fractions have the same bottom number, the pieces are equal in size so you just compare the top numbers. The fraction with the bigger top number is larger.

→ $3/5$ is bigger than $2/5$

→ $4/5$ is bigger than $1/5$

MODEL THIS ON THE BOARD

SAME-SIZE CHOCOLATE BARS

- 1 Both bars are cut into **5** equal pieces so the bottom number is the same.
- 2 One bar shows **2** pieces shaded and the other shows **3** pieces shaded.
- 3 Three equal pieces is more than two equal pieces.
- 4 So $3/5$ is bigger than $2/5$.

DISCUSSION STARTER

REFLECT When fractions share the same bottom number, how do you tell which is bigger?

ANSWER KEY

Scaffold: visual check on the page

Q1: $5/6$

Q2: $4/5$

Q3: $2/9$

Q4: $7/8$

Q5: $4/5$

Q6: $3/10$

a) **Always** : Equal-sized pieces mean more pieces always make a bigger fraction.

b) **Never** : Three fifths is more than two fifths so $3/5$ is bigger.

c) **Always** : The pieces match in size so only the count of pieces matters.

d) **Never** : Three quarters is clearly more than one quarter.

EXTENSION SHEET · STRETCH ANSWERS

S1: $7/10 < 9/10$

S2: Eoin ($4/5$ is more than $3/5$)

S3: $6/8$

S4: 3 more slices ($3/8$ more)

S5: $2/5$ and $4/5$ have the same size pieces, so just count them: $4/5$ is bigger. Fifths and quarters are different sizes, so counting is not enough.

Investigation: Same bottom, different tops — open-ended; scan pupils' working for valid solution paths rather than a single answer.