Creating and naming fractions with double-sided counters

Foundational concepts in fractions: Unit 2 — Resource

Unit 2 highlights the importance of providing a range of contexts for students to practise making and/or describing fractions.

Purpose

After introducing fraction symbols, the following activity is one way to enhance understanding of how to name and symbolically represent fractions of a set and reinforce what each part of the symbol represents.



Materials

Each student will need a paper cup and a set of two-coloured double-sided counters.

Activity sequence

- 1. Give students some double-sided counters in a cup. Initially give the same number of counters to each student.
- 2. Students count how many counters they have in the cup and choose one of the colours to be the focus colour.
- 3. On your signal, students turn their cups so the counters spill out.
- 4. Students record the number of focus colour counters as the numerator and the total number of counters of both colours as the denominator. For example, using blue as our focus colour in the image above, we would record $\frac{5}{2}$.
- 5. Students read their fraction to a partner. In this example, students would say, *five-eighths of the counters are blue*. The two students then compare their fractions and decide which is bigger.
- 6. Discuss the results as a class, revising key language and concepts.
- 7. As a whole class, you could ask groups of students to come to the front of the classroom with their written fraction symbol and order themselves according to size.

Suggested follow-up activities

As students gain confidence and understanding in naming and representing fractions of a set, you could give students different numbers of counters and ask them to:

- find students with the same denominator and put themselves in order of fraction size
- organise themselves into groups of those whose fractions represent quantities such as less than a half, a half, more than a half
- identify anyone who has an equivalent fraction.





More information

If you would like more information, please visit the QCAA website www.qcaa.qld.edu.au and search for 'Foundational concepts in fractions'.



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