

Topic A

Partition a Whole into Equal Parts

In topic A, as an introduction to fractions, students apply their understanding of equal shares from earlier grades to partitioning a whole into equal parts.

Beginning with the familiar units of halves, thirds, and fourths, students partition concrete objects into equal parts. They associate the number of equal parts that a whole is partitioned into with the fractional unit, and they name fractions in unit form. Throughout the topic, students have multiple opportunities to see that as the number of equal parts that a whole is partitioned into increases, the size of each part decreases, regardless of the shape of the whole.

Students create fraction strips by folding paper into equal parts to use as a tool throughout the module. Through repeated folding, students see and can explain the relationship between halves, fourths, and eighths; between thirds and sixths; and between fifths and tenths. These unlike units are described as being related.

Students transition from concrete area models to pictorial area models and define 1 of a fractional unit as a unit fraction (e.g., 1 fourth). They draw, partition, and label unit fractions by using pictorial models. The topic ends with students advancing their understanding by writing unit fractions in fraction form. They also begin to reason about fractions as numbers.

In topic B, students use unit fractions to compose non-unit fractions and compare fractions with the same numerator.