An important kind of relationship between things is when one thing is a part of a whole. (NEW BENCHMARK)

Fractions are numbers we use to stand for a part of something. (K-2, p. 130)

When the linear size of a shape changes by some factor, its area and volume change disproportionately: area in proportion to the square of the factor, and volume in proportion to its cube. Properties of an object that depend on its area or volume also change disproportionately. (K-2)

Some interesting relationships between two variables include the variables always having the same difference or the same ratio. (NEW BENCHMARK)

The expression $\frac{a}{b}$ can mean different things: $a$ parts of size $\frac{1}{b}$ each, $a$ divided by $b$, or $a$ compared to $b$. (NEW BENCHMARK)

Estimate distances and travel times from maps and the actual size of objects from scale drawings. (6-8)

Shapes can match exactly or have the same shape in different sizes. (6-8)

Use ratios and proportions, including constant rates, in appropriate problems. (DC)

Use, interpret, and compare numbers in several equivalent forms such as integers, fractions, decimals, and percents. (12B/2…)

Use fractions and decimals, translating when necessary between decimals and commonly encountered fractions. (12B/2…)

Add, subtract, multiply, and divide whole numbers mentally, on paper, and with a calculator. (12B/1)

Use calculations to compare amounts proportionally. (12C/1)

Use calculators to compare amounts proportionally. (12C/1)

Use, interpret, and compare numbers in several equivalent forms such as integers, fractions, decimals, and percents. (12B/2…)

Readily give the sums and differences of single-digit numbers in familiar contexts where the operation makes sense to them and they can judge the reasonableness of the answer. (12B/2…)

Sometimes in sharing or measuring there is a need to use numbers between whole numbers. (9A/2)

Shapes can match exactly or have the same shape in different sizes. (9C/1)

Estimate distances and travel times from maps and the actual size of objects from scale drawings. (12B/5)

Use whole numbers and simple everyday fractions in ordering, counting, identifying, measuring, and describing things and experiences. (12B/1)

Use numerical data in describing and comparing objects and events. (12D/3)

Describe and compare things in terms of their number, shape, texture, size, weight, color, and motion. (12B/1)

Readily give the sums and differences of single-digit numbers in familiar contexts where the operation makes sense to them and they can judge the reasonableness of the answer. (12B/2…)

Parts and wholes

Description and comparison

Computation