

## 5.2 Ten Times and One-tenth of

### In this unit students

- understand the relationship between the value of adjacent digits in a number;
- relate volume to multiplication and addition
- read, write, compare, and round decimals to thousandths.

Students begin by solidifying their understanding that the value of a digit is 10 times as much as the value of the same digit one place to its right. They extend that understanding to recognize that the value of a digit is  $\frac{1}{10}$  the value of the same digit one place to its left. Note that this is the first introduction of multiplying by a fraction, work that students will generalize in [Unit 5.4](#). Students use this understanding to read, write, round, and compare decimals. They multiply and divide whole numbers and decimals by powers of ten and explain patterns in the placement of the decimal point. Place value and the properties of operations underpin the standard algorithms for working with base-ten numbers, and this work supports students' developing fluency with the standard algorithm for multiplying multi-digit whole numbers.

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