

# Mathematical Background

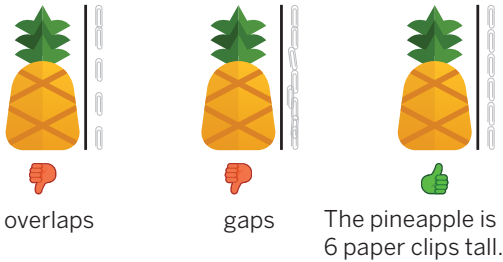
Here is an overview of the content your students will learn in this unit.

## Length Measurement Within 120 Units

### Measure the length of an object using non-standard units.

TEKS 1.7.B

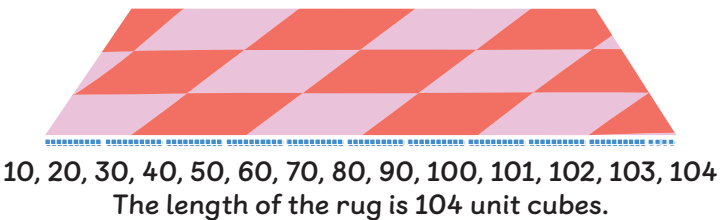
- The length of an object can be measured using non-standard units, such as connecting cubes, unit cubes, and paper clips.
- » The units are the same-size lengths that, when placed end-to-end with no gaps or overlaps, show how long an object is.



### Count units up to 120.

TEKS 1.5.B

- Units up to 120 can be counted in tens, fives, twos, and ones.
- » 104 unit cubes: It can be counted by tens and then ones.



### Represent and Solve Story Problems.

TEKS 1.3.B

- In *Compare* story problems with unknown in all positions, the unknown could be the larger number, the smaller number, or the difference.
- In *Take From* story problems with unknown in all positions, the unknown can be in the start, change, or result.
- In *Compare* and *Take From* story problems, the unknowns can be determined using objects, manipulatives, pictorial models and represented with equations.

#### Compare, Larger Unknown

An emu's footprint is 11 connecting cubes long.

A giraffe's footprint is 5 connecting cubes longer than an emu's footprint. How long is a giraffe's footprint?

$11 + 5 = \underline{\hspace{2cm}}$

e ○○○○○○○○○○ 1 2 3 4 5

g ○○○○○○○○○○●●●●●

answer: 16 connecting cubes

equation:  $11 + 5 = 16$

#### Take From, Start Unknown

Sean had some branches.

He gave 3 branches to Trevor.

Now Sean has 12 branches.

How many branches did Sean have before giving some to Trevor?

           - 3 = 12

3 ○○○○○○○○○○

answer: 15 branches

equation:  $15 - 3 = 12$

## Unit Investigation

**Lesson 1** is the Unit Investigation. Students explore comparing heights of block towers and classroom objects and justify their comparisons to build curiosity and apply their own knowledge in a variety of ways. Use the **Caregiver Connection** to help students continue to explore the math they will see in the unit.

### Caregiver Connection

Students may enjoy comparing the lengths or heights of objects at home. Encourage students to look for things that are longer, shorter, or taller than other objects. You can ask:

- “Which object is taller? Which object is shorter? How do you know?”
- “How could you describe the height of these objects?”