

Title of Book: **How to Build a House**
Author: **Saskia Lacey**
Publisher/Year: **Quarto Publishing Group/ 2016**
ISBN: **978-1-63322-141-3**

Grade Levels for Recommended Use: Grade 3

TEKS:

(5) Algebraic reasoning. The student applies mathematical process standards to analyze and create patterns and relationships. The student is expected to:

(C) describe a multiplication expression as a comparison such as 3×24 represents 3 times as much as 24;

(D) determine the unknown whole number in a multiplication or division equation relating three whole numbers when the unknown is either a missing factor or product; and

(E) represent real-world relationships using number pairs in a table and verbal descriptions.

(6) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional geometric figures to develop generalizations about their properties. The student is expected to:

(C) determine the area of rectangles with whole number side lengths in problems using multiplication related to the number of rows times the number of unit squares in each row;

Brief Summary: *How to Build a House* is not only a story book, but also a tool book. The students can follow Eli's steps from designing the blueprint to electrical installation to build a dream house. The book mentioned many terms related to construction, such as plumb line, purlin, column. Building a house is not an easy task. Eli sought assistance from his friends and family members. Finally, they finished building a house together.

Materials needed:

- worksheet
- pencils
- crayons

Suggested Activity:

The goal of this activity is to practice multiplication. After reading the book, students will design their dream house. They will need to pay attention to proportions on the blueprints.

Designers avoid building rooms that are too big or too wide. The students will calculate the size of each room and come up with the total of the house.

First, the teacher read the book *How to Build a House*.

Second, the teacher review multiplication and some basic rules of designing the blueprints.

Then, the teacher has the students do the worksheet and coaching.

Lastly, the teacher has students share the design of their dream house and check if the total is correct.

References:

Christina Raiti. (n.d.). Lesson 2: Build Your Own Dream House. Retrieved from <https://commons.trincoll.edu/craiti/lessons/lesson-2-build-your-own-dream-house/>

Adapted by: Hsin-Ni Li (2018)