

D.I.Y. STEAM: GINGERBREAD HOUSES

Adapted from <http://showmelibrarian.blogspot.com/2012/12/gingerbread-house-workshop-holiday.html>

SUPPLIES

paper • pencil • small, clean milk carton (or cardboard, scissors, and tape to build a frame)
graham crackers • frosting • edible decorations • butter knife/spatula • ruler

DIRECTIONS

Step 1: Design Your Gingerbread House

How would you like your structure to look? Use the pencil and paper to sketch a plan.

Step 2: Build the Frame

Cut and tape the cardboard to construct a frame for your building. (Skip this step if using a milk carton.)

The perimeter is the length around the outside of a shape.

Find the perimeter of your frame by adding together the length of all 4 sides: _____

Step 3: Calculate and Construct

Use the graham crackers and frosting to create the walls and roof of your structure.

Each graham cracker sheet contains 4 crackers. How big is one cracker? _____ L x _____ W

An *estimate* draws upon your observations to roughly guess the value or size of something. Estimate the number of crackers you will need to cover your frame, and compare it to the actual number.

Estimate: _____ versus Actual: _____

Step 4: Decorate

Use the frosting and edible decorations to make your structure unique.

Questions for Discovery

- Was your estimate close to the actual value? What would happen on a real construction site if an architect or engineer miscalculated the amount of materials needed?
- What function does the frame serve? (If you have leftover materials, try building a house without a frame.)

Further Learning

- Latham, Donna. [*Skyscrapers: Investigating Feats of Engineering!*](#) Nomad Press, 2013. (gr 4 – 7)
- Hale, Christy. [*Dreaming Up*](#). Lee & Low Books, 2012. (gr K – 3)
- Heine, Florian. [*Thirteen Architects Children Should Know*](#). Prestel Art, 2014. (gr 4 - 7)
- Rockliff, Mara. [*Gingerbread for Liberty*](#). Houghton Mifflin Harcourt, 2015. (gr K – 4)



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