



2024 International Day of the Girl Building Activity Featuring *Reina*, Canada's First Female-Developed Condo Project

When is the United Nation's International Day of the Girl?

Friday, October 11 marks the [United Nation's International Day of the Girl](#). The theme this year is, *Girl's Vision for the Future*. It highlights the pressing need for action while celebrating the enduring hope and strength found in the voices and visions of girls shaping tomorrow.

As we celebrate the strength, resilience, and potential of girls everywhere we thought of the trailblazing team at *Reina*, the Spanish word for queen. The *Reina* Condo Project is the first all-female led development in Canada! To design this condo this team did things differently: engaging the community, learning new perspectives, and designing for multigenerational living. They demonstrate how using one's voice and talents can positively shape our communities.

Required supplies:

- a copy of *The House That She Built* OR access the [YouTube read aloud](#)
- inexpensive building materials for the entire class (please see building options below)
- printable pages (please see printable handouts below)

Alternative books your library may already have:

A Girl Can Build Anything ([YouTube read aloud](#))

Boxitects ([YouTube read aloud](#))

A Sky Blue Bench ([YouTube read aloud](#))

Building Our House ([YouTube read aloud](#))

Someone Builds The Dream ([YouTube read aloud](#))

General Language Arts outcomes/expectations addressed:

- read and comprehend short, simple texts, using knowledge of words, grammar, cohesive ties, sentence structures, and background knowledge
- express personal thoughts and feelings about ideas presented in texts, such as ideas about diversity, inclusion, and accessibility
- gather information and content relevant to a topic
- evaluate evidence and draw conclusions about some aspects of the interrelationship between people and natural and built features of their local community, and some of the effects of this interrelationship

General Science outcomes/expectations addressed:

- use an engineering design process and associated skills to design, build, and test devices, models, structures, and/or systems
- communicate findings, using science and technology vocabulary and formats that are appropriate for specific audiences and purposes
- describe practical applications of science and technology concepts in their home and community, and how these applications address real problems
- analyse contributions to science and technology from various communities

Teacher Lesson Plan:

1. **Read** *The House That She Built* to the class (or choose one of the other books listed). Students will learn of 18 different skilled trades needed to build a home.
2. Lead a **class discussion** to:
 - a. extend understanding of texts by connecting the ideas in the book to students' own knowledge and experience, to other familiar texts, and to the world around them *Sample question: Does anyone in your family work in any of these roles? Are any careers missing (eg. realtor)? How can a home be made accessible for all family members (eg. all ages, those using a wheelchair or who are visually impaired, etc)?*
 - b. identify the main idea and a few elements of texts with support.
 - c. express personal thoughts and feelings about what has been read. *Example question: Which career do you find most interesting and why?*
 - d. identify some text features (e.g., *illustrations, symbols, photographs, title, page number, table of contents*) and explain how they help readers understand texts.
 - e. predict the meaning of and solve unfamiliar words using different types of cues.
3. **View** the Reina slide deck which spotlights the careers of different team members and have students complete the activity on the last slide. Thank you to Stephanie Beaudoin of Urban Capital Property Group for creating this presentation!
4. **Watch** the Reina video interview and **discuss**. *Sample questions: What considerations went into the design of the building? How many of the team members grew up planning to pursue a construction career? Why is it important to discuss diverse career paths throughout K-12 education? How are each of the team members community helpers?*
5. Students **perform** a hands-on building activity which is quick, easy, low-cost, and engaging. Consider using the building activity to preview content to be studied this school year, such as forces, stable shapes, or patterns (see building activity ideas below).
6. Students **write** and/or **draw** (please see printable pages below):
 - a. illustrate the “see it to be it” face, color the figure, and verbally share which skilled trade role they would want on-site (link to free coloring pages [here](#). Scroll down the webpage.).
 - b. complete the “Who do I want to become?” paragraph writing handout.
 - c. design a sticker or hard hat which represents who they are.
7. **Concluding Activity:**

Did you know... that the construction industry uses drones, 3D modelling, VR headsets, digital twins, augmented reality (AR), and robots? We often think of hammers and hard hats when it comes to building. But, technology, coding, AI, and using new building materials and practices play an essential role in modern construction! Here are three examples of innovation in the industry:

 - [Spot the Dog by Boston Dynamics](#)
 - [3D printed homes](#)
 - [Bricklaying robot](#) – Ask students how this relates to their knowledge of block coding?
8. **Dance break**

[Here](#) is a fun way for students to get some energy out while seeing the versatility of robots!

Happy International Day of the Girl!

Hands-On Building Activities (all less than \$10/class):

1. Bucatini Tower and Marshmallow Challenge → NASA [instructions](#) and [video](#)

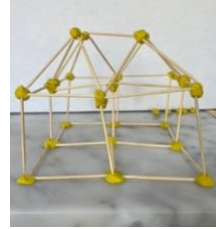
Supplies: 1 package of bucatini (thick spaghetti available at the grocery store or Italian grocer) and 1 package of marshmallows

2. Tower building with index cards → [ideas](#)

Supplies: 2 packages of multicolored index cards where each group gets a stack of index cards of a single color [Dollarama]

3. Toothpick and clay towers (We found PlayDoh wasn't thick enough so we used clay. [video](#))
[Real world example of a mass-timber structure.](#)

Supplies: 300 toothpicks and 1 package of multicolored clay (each group gets on colored strip)

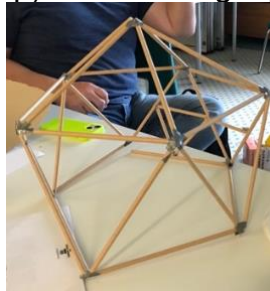


4. Toothpick and mini marshmallow structures [link](#)

Supplies: 300 toothpicks and 2 package mini marshmallows

5. Paper straw structures to make geodesic domes ([Real world examples](#))

Supplies: 500 straws (50 straws per group) and masking tape [250 pack of straws at Dollarama]



6. [Newspaper tube](#) structures and teacher resource to make [geodesic domes](#)
Supplies: newspapers to roll up

7. Building with mini red Solo cups (great [activity](#) for pre-Kindergarten through grade 2)

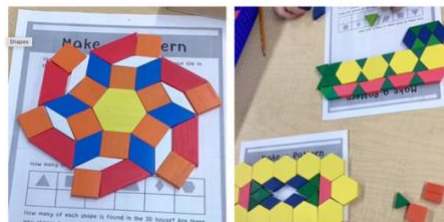
Supplies: a few bags of mini or full size red Solo cups

8. Build with classroom supplies ([Here](#) is what Australian land developer Multiplex did with students!)

Supplies: wooden blocks, LEGO, magnetic tiles, whatever you have on hand

9. Become a tiler and design a mosaic

Supplies: wooden shapes (lower elementary) OR use paper to design a tile (also shown in the photo on the right are student-built wooden floors using white glue, popsicle sticks, and cardboard. Photo courtesy of teacher Kerry Graham).





10. Become an architect and model with clay (Real world connection [here](#))

Early finisher activities:

- Free printable skilled trades coloring pages are available [here](#) (scroll down the webpage)
- Free on-line ABCYA games:
 - [Make a house](#)
 - [Make a treehouse](#)
 - [Daisy's Plumber Puzzle](#)
 - [Lights On 2](#)

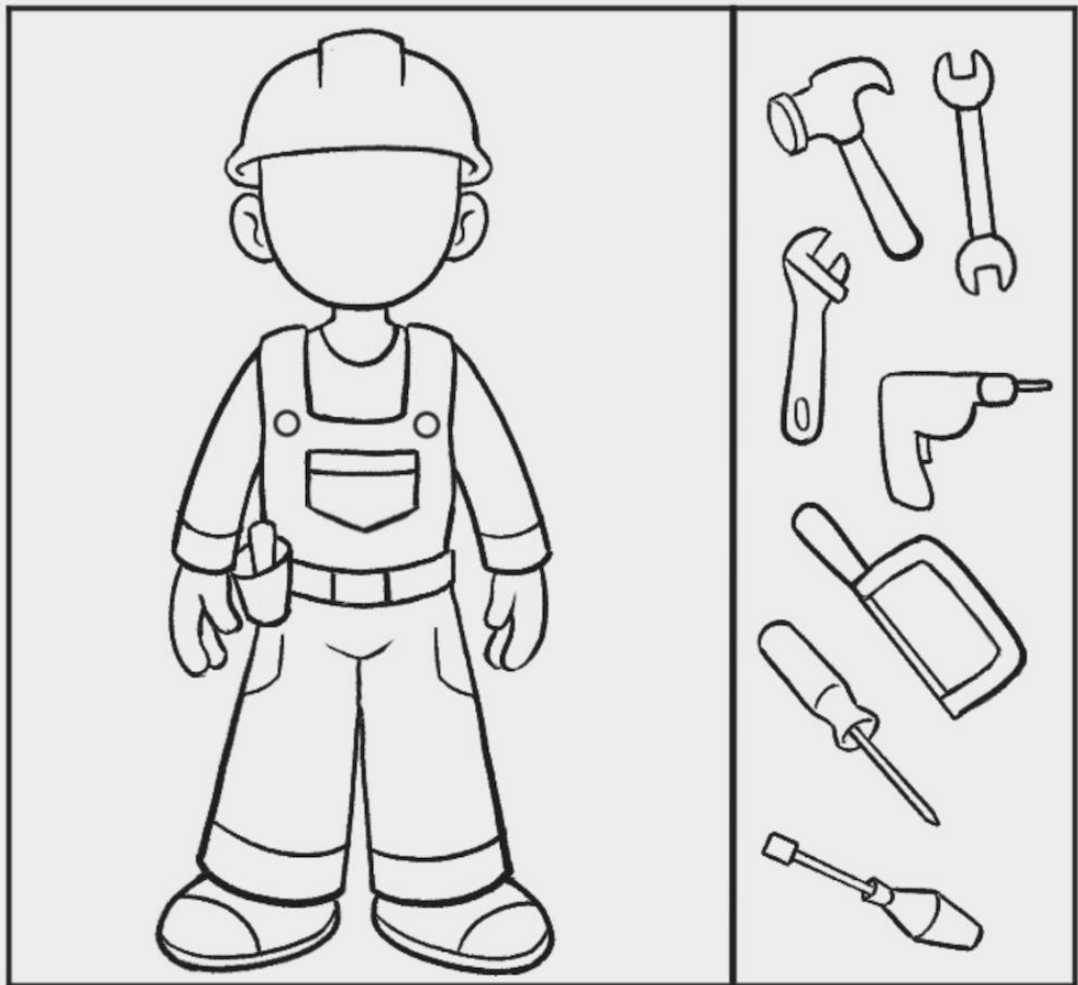
Optional viewing:

Find out more about the many diverse roles in construction by watching [Honour the Work's interview with The House That She Built author, Mollie Elkman](#)

Did you know...even as a child Mollie knew that she wanted to write a children's book? This November her second book will be released and is titled, *The Car That She Built!*

See It To Be It

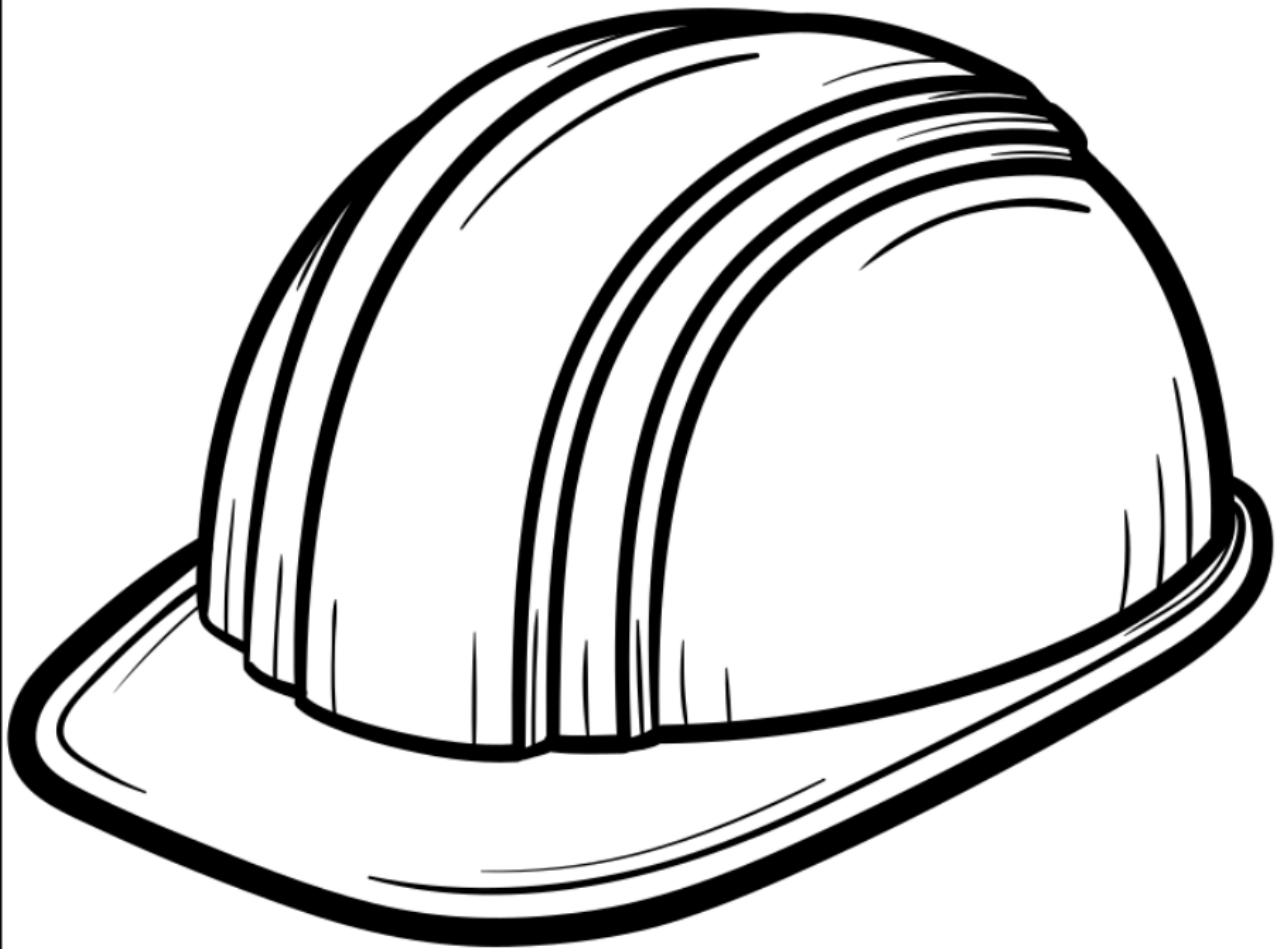
Complete the drawing and give them some tools to do their job!



Write a short sentence to share what you learned.

ALL ABOUT ME LOGO

Design a logo on the hard hat that represents everything about you:



Why this represents me:
