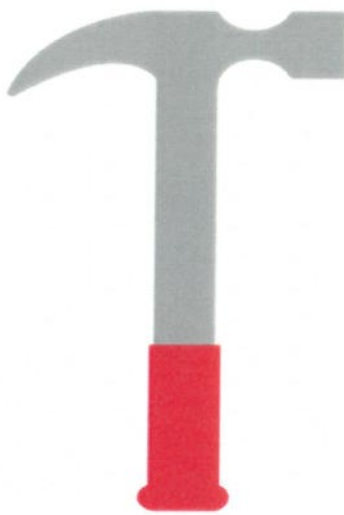


SCNL PRESENTS

MAKING AT HOME



SKILLED FUTURES



WORKBOOK

Skilled Futures: Making at Home – Boat Building Challenge

“If you want to build a boat, do not instruct the men to saw the wood, stitch the sails, prepare the tools and organize the work, but make them long for setting sail and travel to distant lands they’ve ever seen before.”

- Antoine de Saint-Exupery

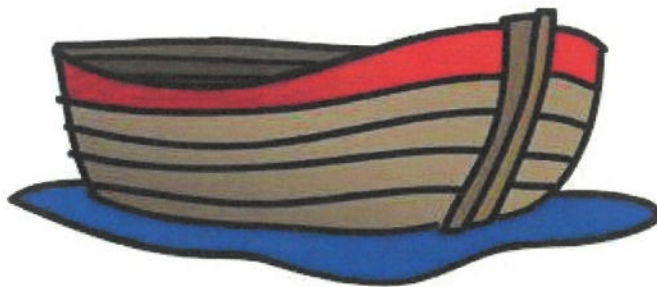
A career in the Boat building field has so many different aspects of design and technology mixed into one key element; the science or art of building and designing a boat and it’s operating systems. This includes the boat design for its uses, the mechanical way in which it moves, its navigation system and other systems the structure requires. There are many different types of boats including a vessel, a cruise ship, a fishing boat, and a pontoon just to name a few. Keep the boatbuilding trade in mind as you create your own design for this challenge.

Design Challenge

Imagine you are a boat builder, preparing for an exploration at sea. You are tasked with building your own boat, built to last the rough seas of Newfoundland & Labrador. What type of boat will you make? How big will it be? What will need to be included for the long voyage? Will it have an observation deck? Where will you store your supplies? How will you anchor it to shore? Will your design be functional?

Design a blueprint for your design keeping in mind a prototype will be created as well. What would the structure look like? How would you design it using things from your home? Will it have rooms? How would you make it functional? How will you make it your own? What will you take on the boat to do for fun?

Create a unique plan and design the boat using things you can find around your home. Be creative!



Building & Turning Your Sketches into reality - Turn your ideas into a real-life prototype!

Gather simple materials and start building a masterpiece! Below is a list of some simple materials you might find laying around your house. Safety is #1 so ask an adult for help when using sharp or hot tools! For this activity, a template has been provided however, feel free to use other materials to decorate or create your own boat!

Cardboard	Glue Gun	Straws	Scrap Fabric & Notions
Cereal Boxes	Glue Stick	Skewers	Computer Designs
Styrofoam	Scissors or Utility Knife	Toothpicks	Paint
Tin Foil or Saran Wrap	Markers	Popsicle Sticks	Craft Supplies
Garbage Bag	Ruler or Measuring Tape	Pipcleaners	PomPoms
Small Pieces of Wood	Playdough or Clay	String	Anything You Can Find!
Bottles or Cans	Tape (Variety)	Zip Ties	

Problem Scenario

Here are some guidelines to keep in mind before you start:

- You must include a sketch of your design in your final project.
- You can use things you find around your home to create the structure.
- Keep in mind which skilled trades workers you will need to “hire” for this project. What will you ask them to do to make this design successful?
- Is your design functional? If not, what else will you need to add?
- Build your boat to make it be able to float in your bathtub, sink or in a container of water.

Success Determinacies

Success will be determined by the degree to which your design solution:

- Addresses the design challenge
- Addresses an identifiable need for the end-user
- Uses a large amount of materials, resources, and tools
- Is accompanied by a highly elaborate sketch illustrating functionality
- Shows your understanding of how the boat building trade applies to this challenge
- Is it whimsical and makes whoever views it smile?
- Has a clear theme or story behind each element (the reason why you choose the structure you did).
- Is it aesthetically pleasing and well constructed?
- Is creative, futuristic, innovative, and reliable?





Parameters

- Make sure you are keeping in mind that the boat will have to have everything you need to sail out into the ocean.
- Make sure you have a sturdy structure that is light, so it can float.
- Create one unique feature on the boat.
- The boat should be structured well and include a blueprint if you wish.

Questions

1. Name 3 skilled trades or technology workers you would need to hire to complete this boat:

2. Name something you found interesting or did not know or find about boat building:

3. Name one challenge you came across during the design process of this task. How did you overcome it? If no challenges occurred, what was your favourite part about your design? Explain.

4. Name one thing you learned from completing this activity.



5. Are you interested in pursuing a career in the skilled trades or technology field? If so, which one & why?



