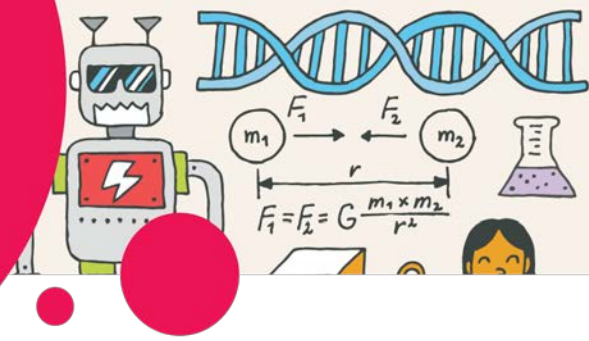


BRIDGE BUILDERS



Quebec Bridge — Pont de Québec, Québec, Canada. — 20.

MUSEUM MISSION

Your mission, should you choose to accept, is to explore the museum and gain as much knowledge as possible!



Exhibitions

Artifact Alley

Stroll through interactive displays and over 700 artifacts.

A Into the Great Outdoors

See how people use technology to get outdoors and experience Canada.

B Steam: A World in Motion

Explore a time when steam made Canada—and the world—go round.

C Sound by Design

Hear and see what happens when sound meets design.

D From Earth to Us

Explore how we transform natural resources to make the everyday things in our lives.

Crazy Kitchen +

Challenge your perceptions and experience illusions that play with your senses.

E Medical Sensations

Explore the world of medicine through the five senses.

F Hidden Worlds

Engage with microscopes, telescopes, and digital interactives to explore worlds beyond our reach.

G ZOOM (ages 0-8)

A hands-on space where children can imagine, build, test, try...and try again!

H Wearable Tech

Discover a range of innovative technologies designed for the body.

I Technology in Our Lives

See the gadgets, tools, and appliances that shape our lives.

Exploretek

A tinkering space dedicated to learning by doing.

Steam City Train Set

Exhibit – Steam: A World in Motion – Model Train Set



Find any bridge in the playset. Place a train on the bridge and using arrows, draw where the forces are acting on the bridge.

Think: Why are these types of bridges used for trains?

Railways

Exhibit – Steam: A World in Motion - Locomotives



Pick any locomotive and read its infographic. Can you **find** what it means to be a **4-8-4** locomotive?

Think: Examine the railway. Does it remind you of any other structure – which one?

Snowshoes

Exhibit – Into the Great Outdoors – Snowshoe Interactive



Find and test the different snowshoes. Circle the one which works best.



Think: How do snowshoes work? Circle your answer:

- Snowshoes are snow resistant
- Snowshoes distribute a person's weight across a wide surface
- Snowshoes work by using snow magic

Bicycle Vortex

Exhibit – Into the Great Outdoors – Freedom on Two Wheels



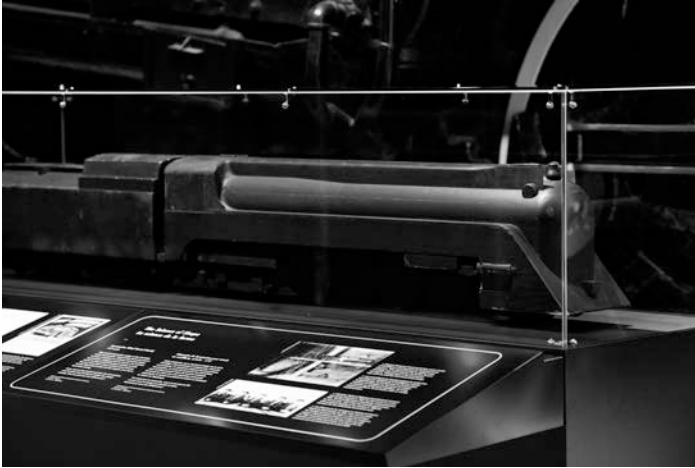
Find the bikes in the vortex. What are two changes that have been made to bikes over time? (Hint: the closer you get to the ceiling, the newer the bike)

- 1.
- 2.

Think: How are the bikes being supported? (Hint: the two bottom bikes are held differently than the rest!)

Structure Models

Exhibit – Steam: A World in Motion - Locomotives



Find the train model. This model tests how real trains interact with wind. Draw a vehicle you think is aerodynamic (low wind resistance). Use arrows to show how wind will affect it.

Think: Why would engineers build a model before building a structure?

Living Small

Exhibit – Technology in Our Lives – Tiny House



Can you **find** the bed in the tiny house? How is it being supported? Using arrows show where forces are acting on the bed.

Think: The tiny house is incomplete! What would you add to finish it?

Under Pressur

Exhibit – Wearable Tech – Newtsuit



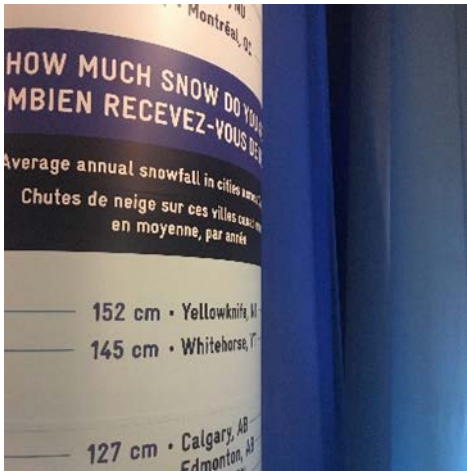
Find two physical features of the suit that allow it to function in the deep sea:

- 1.
- 2.

Think: What depths can the suit reach while keeping atmospheric pressure?

Snow Levels

Exhibit – The Great Outdoors – Snow Fall Column



Find which city gets:

Most snow:

Least snow:

Think: Name one feature that helps a house support the load of heavy snow:

Name one feature that helps a house cope with heavy rainfall: