STEM STUDENT PACKET

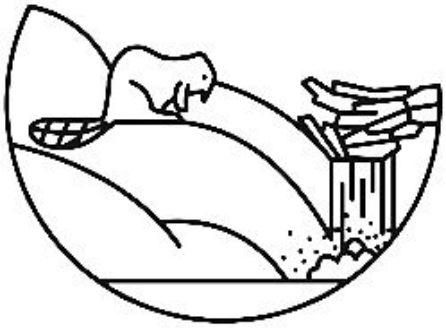
CHALLENGE #2:
BUILD LIKE A BEAVER

YOUR TEAM'S MISSION

Build a dam with sticks, leaves, rocks, and play dough, that will hold 150 gr of water for at least 60 seconds.

Name:_____
Section:_____

STEM #2 CHALLENGE: Build Like a Beaver



ReseARCH

After watching the video on beavers write below **two reasons** why beavers build dams AND **draw** a picture of one.
https://www.youtube.com/watch?v=VuMRDZbrdXc

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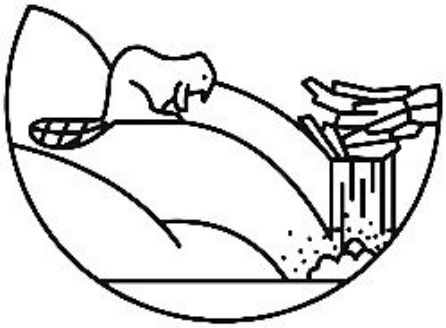

PLANNING

1.Get your supplies bag with the sticks and leaves and measure and record in a table the length of 10 of your leaves OR sticks to the nearest cm.

2. Create a line plot to show the lengths of your sticks/leaves.

3. Record the length of your longest and shortest stick and find the difference.

Longest:
Shortest:
Difference:

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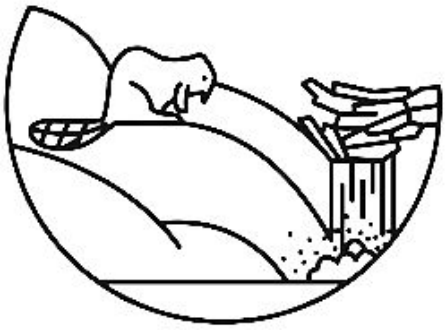

PROTOTYPING

Design the Prototype - Create a labeled diagram of your prototype and add a photo of the finished dam.

Materials

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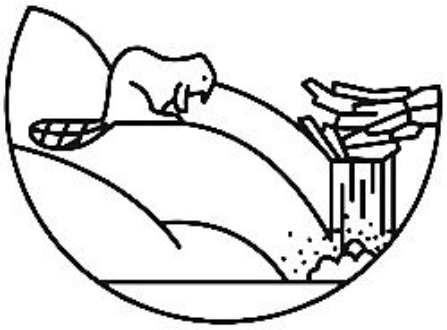

TESTING

Position your dams and drop the 150 g of water and record your data.

- Did your dam hold the water without flooding?

_____

- How long did the dam hold the water before the first leak appeared?

_____

- Where did you record the first leak or weak spot on your dam?

_____

_____

Areas to improve:

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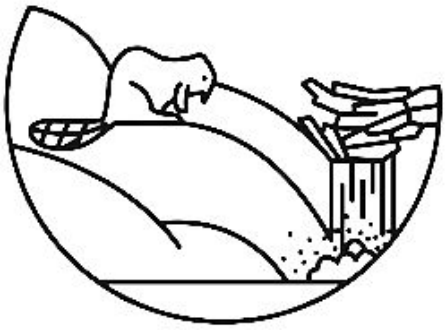

Redesign

Sketch your ***new*** design and take a photo of your new improved dam.

Retesting

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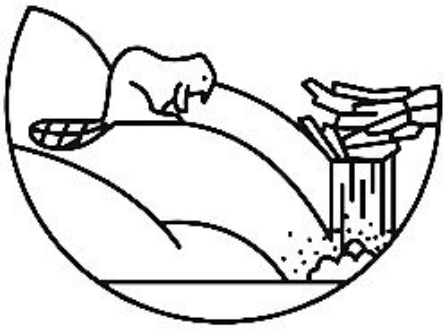

REFLECTIONS

1. Which part of your design did not work as you expected? Which part worked?

2. What would you change if you had to do it one more time?

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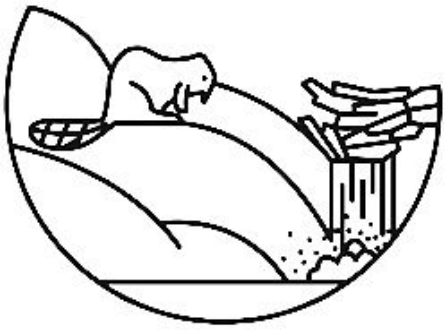

Challenge Check-In

Did you test your design?

Did your prototype work?

Did you make improvements to your design?

Did you enjoy this challenge?