



HELLO PARENTS,

Winter is the perfect time to get children excited to bundle up and go outside to have fun. Hands-on STEM activities inspired by winter invite your child to explore, test, think, observe, and discover. Experimenting leads to discoveries and discoveries spark curiosity! This newsletter offers you winter STEM activities that allow children to explore the concepts of science, math, engineering, and technology.

ACTIVITIES

INFANTS (3 – 18 MONTHS)

BUILDING OUR SNOWMAN

MATERIALS:

- Contact paper
- Marker
- Tissue paper

DIRECTIONS:

- Draw three different size circles on the non-sticky side of the contact paper to make a snowman shape.
- Peel back the paper to reveal the sticky side. Leaving the sticky side facing out, tape the Snowman to your mirror.
- Give your child tissue paper and encourage them to stick it onto the snowman.
- Talk about the snow and the cold and make lots of shivery Brrrrrr! noises.

[Click here](#) for more winter activities.

TODDLERS (19 MONTHS – 2.5 YEARS)

MELTING FROZEN HANDS

MATERIALS:

- Disposable gloves
- Glitter
- Small toys
- Water
- Container for melting hands in and collecting water
- An eyedropper/turkey baster

DIRECTIONS:

- Add the items, glitter and food colouring (optional) to a disposable glove.
- Fill the glove all the way with water and snap the end with a rubber band as if you were tying off a balloon.
- Place the glove in the freezer.
- Remove the frozen hands by cutting the end off of the rubber glove and peeling the glove off of the hand. Set them in a container.
- Encourage your child to explore and discover the frozen treasures.

[Click here](#) for more activities.

PRESCHOOLERS (2.5 – 5 YEARS)

FROST JAR

MATERIALS:

- Glass jar
- Ice
- Salt
- Blue food colouring (optional)

DIRECTIONS:

- In a small bowl, colour some water blue and set it aside.
- Fill your jar about 3/4 of the way with crushed ice (crushed ice will freeze faster than larger chunks).
- Let your child add a half-inch layer of salt and pour the blue water over it.
- The frost should start to form in just a few seconds.
- At first, your child may not be able to tell that the condensation has become frost.
- But after about 3 minutes, you will see a thick layer of ice crystals on the surface of the jar.

[Click here](#) for more activities.

JK/SK (4 – 6 YEARS)

ICE CASTLE BUILDING CHALLENGE

MATERIALS:

- Ice tray
- A large tray
- Salt

DIRECTIONS:

- Make sure you freeze enough blocks to make large towers.
- Show your child how the salt will melt the ice just a bit so that the ice blocks will stick together. This is the secret of the ice castle building.
- Let your child make their own castle designs. They may prefer to make large single tower castles or create elaborate designs.
- During this STEM challenge, you can discuss how ice forms and the different forms that water can take (solid, liquid, or gas).
- You can also discuss how salt helps ice melt faster, which helps the ice blocks stick together.
- Children will also learn that they have to be careful stacking their ice castle towers or the whole thing will come tumbling down!

[Click here](#) for more activities.

SCHOOL-AGERS (6 – 12 YEARS)

WINTER SCENT LAB

MATERIALS:

- 6 small empty glass jars
- Water
- 5 cloves
- 1 cinnamon stick
- Twig of pine
- A tablespoon of vanilla extract
- A teaspoon of coffee grounds
- Peppermint
- Food colouring (optional)

DIRECTIONS:

- Choose the spot where you want to set up a scent lab.
- Get 6 empty glass jars and line them up.
- Open the jars and place each scented item in a jar.
- Fill the jars with water and add drops of food colouring if you want.
- Secure the lids on tightly and store them for 24 hours. The scents will be absorbed by the water.
- Remove any undissolved items from the jars.
- You can play a guessing game asking your family members to smell and tell what scent is in the jars.

[Click here](#) for more activities.



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and Citizenship Canada

Immigration, Réfugiés
et Citoyenneté Canada

A TIP FOR TODAY

- Embrace the cold weather and use it to explore the world of winter science experiments with your child.
- Let your child ask interesting questions and come up with amazing observations and answers.
- Encourage your child to be an attentive learner.
- Teach your child how to work collaboratively and encourage innovative and creative thinking.
- Provide your child with opportunities for failure in a safe environment.