

Have you run out of things to do to entertain your kids? Well here are some outdoor and indoor ideas for these snowy days.

### **Indoor Activities**

**Crystal snowflakes** – Use a pipe cleaner to make a snowflake shape. Fill a glass cup or wide mouth jar with boiling water. Add 3 tablespoons of Borax for each 8 oz. of water in the cup. Stir until Borax is dissolved. Suspend the snowflake in the glass/jar by tying it with a string to a pencil and placing the pencil across the mouth of the glass/jar. Make sure the snowflake does not touch the sides or bottom of the glass/jar. Also make sure the snowflake is completely submerged in liquid. Let stand for 8 to 12 hours. Remove and pat dry. For added creativity add food coloring and make other pipe cleaner shapes.



The science - When you mixed the borax in with the water, you created a suspension. A suspension is a mixture that contains solid particles large enough to settle out. By mixing the borax into hot water, instead of room temperature or cold water, the borax stays suspended longer within the water. As the borax begins to settle out, or sediment, it begins to crystallize. You'll see this crystallization on both the bottom of the jar and, you got it, on your snowflake. The borax continues to sediment on top of the snowflake and on top of other borax crystals until you pull it out of the water the next morning.

**Windbag Challenge** – Bernoulli Principle – Check out Steve Spangler for full details

**Inventor's Box** – collect mechanical items in a container. Supply a flashlight, various flashlights, pliers and wrenches. Let your kids take apart and put together back together the items.

### **Mystery Challenge Bags -**

#### **CHALLENGE ONE: The Pom Pom Launcher**

Mystery bag #1 challenged the children to make a Pom Pom Launcher;

### **POM POM LAUNCHER**

**The Challenge:** Invent a device that launches a pom pom into the air. The further it travels the better!

**Tips:**

- Think about devices that launch things into the air. How do they work?
- Will your launcher be hand held or sit on the floor or table?

**Materials:**  
The contents of the bag should be used to make your pom pom launcher but you do not have to use them all.  
You may also use any of the following items to help you with your challenge;

- Scissors
- Stapler and staples

### Mystery Bag Materials

- Pom poms
- Large index cards
- Paper drinking cups
- Tape Drinking straws
- Popsicle sticks
- Rubber bands
- String
- Paper clips

## MARBLE RUN

**The Challenge:** Create a 3 dimensional, free standing marble run. The marble must travel at least 40 centimetres.

**Tips:**

- Experiment with the height of the starting point – how does the height impact upon the distance your marble will travel

**Materials:**

The contents of the bag should be used to make your marble run but you do not have to use them all.

You may also use any of the following items to help you with your challenge;

- Scissors
- Stapler and staples
- Sticky tape

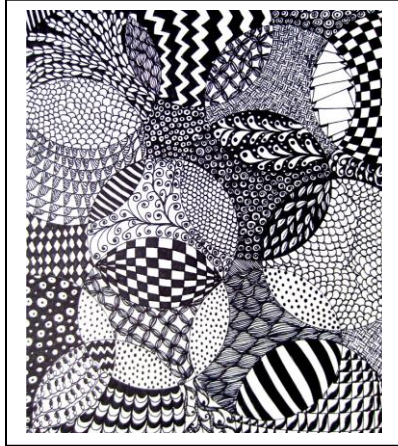
**Additional challenge:** Can you include at least 3 turns and/or 2 changes in level to your track and still have the marble travel 40 centimetres?

## Mystery Bag Contents

- Marbles
- Tape
- A cardboard tube
- Large index cards
- Large popsicle sticks
- Paper clips

3. Paper Structures There are many different types of construction challenges requiring little more than a newspaper and a roll of tape or ball of string... What is the tallest tower you can build from 6 sheets of newspaper. Can your tower support the weight of a small beanie toy? Can you make a bridge to span a distance of 30 centimeters that will support 8 Matchbox cars? Can you build a table from newspaper that will support the weight of 5 books? Can you build a structure large enough to sit inside? Challenge comes by providing children with a distance to span (bridge), height or width to attain (tower/skyscraper), or a weight element (strength of structure). There are lots of different ways that children can manipulate the paper to achieve different results, for example bending, rolling, tearing, scrunching or concertina folding. Challenge variations; Construct with other materials that would typically be considered weak or unsuitable as construction materials, such as drinking straws, playing cards or pieces of dried spaghetti
4. Balloon Powered Vehicles Challenge children to create a moving vehicle powered by nothing more than the air within a blown up balloon. Let them be as creative as they like when it comes to choosing a vehicle that travels across land or water, or through the air. Base materials will vary according to the type of vehicle the children choose to make but as a minimum I suggest you provide the following to allow children to experiment with the balloon-powered element of the challenge; Balloons Straws Tape String Elastic bands Pegs Challenge variations; Set a minimum distance the vehicle must travel. Set a starting point and a target in the room that the vehicle is required to hit. Have a competition between teams or individuals to see which completed vehicle can travel the furthest distance.

Zentangles -



### Outdoor snow and cold weather activities

**Ice balloons** – Place 10 drops of food coloring in a balloon. Fill the balloon with water and tie it off. Set outside to freeze. Use in ball toss games, snow bowling or just decorate the yard.

#### **Icy Scavenger Hunt**

Freeze colored water in ice cube trays. Once frozen, hide the ice cubes around the yard for an icy scavenger hunt.

#### **Frozen Bubbles**

Mix some dish liquid with a dab of water to make a bubble solution. Use a bubble wand or even a funnel, washer, piece of string or a coat hanger to make frozen bubbles.

#### **Cold Molds**

Use kitchen pans to mold snow into beautiful shapes. Build a snow castle with some of the molds.

#### **Snow Tic-Tac-Toe**

Use pinecones and twigs to play tic-tac-toe on a giant tic-tac-toe board drawn in the snow.

#### **Magic Murals**

Fill spray and squirt bottles with colored water. Use the snow as a huge white canvas to create a masterpiece.

#### **Frosty Toss**

Make rings on the snow in a target fashion. Give a point value to each ring. Toss snow balls into the rings from a designated distance and add up the points.

#### **Cool Golf**

Pull out those putters and colored golf balls. Pack down a putt-putt course in the snow. Bury plastic cups for the holes. If you don't have golf equipment, substitute a baseball bat, broom stick, or saber and any type of ball and use them golf style.

#### **Pin the Mouth on the Snowman**

Build a faceless snowman. Use Oreos or other round cookies to let blindfolded children *play Pin the Mouth on the Snowman*.