

Alberta Summer Reading Club

STAFF GUIDE



#ABSRC2020

absummerreading.ca



TABLE of CONTENTS

<u>Sock Bowling</u>	<u>1</u>
<u>Frisbee Golf</u>	<u>3</u>
<u>Olympic Flags</u>	<u>6</u>
<u>Coin Hockey</u>	<u>9</u>
<u>Coding a Maze</u>	<u>11</u>
<u>Marble Maze Madness</u>	<u>14</u>
<u>Rubber Band Powered Car</u>	<u>16</u>
<u>Monster Magnets</u>	<u>21</u>
<u>Let's Play Some Basketball</u>	<u>23</u>
<u>Make Some Noise!</u>	<u>25</u>
<u>Foosball Fun</u>	<u>27</u>
<u>Let's Go Skee Ball</u>	<u>29</u>
<u>Homemade Sidewalk Chalk Paint</u>	<u>32</u>
<u>Make-Your-Own Foam Jersey Bookmark</u>	<u>34</u>
<u>Lava Lamp</u>	<u>37</u>
<u>Paper Ornaments</u>	<u>40</u>

<u>Upcycled Bubble Wands</u>	45
<u>Weekly Outside Challenge</u>	51
<u>Weekly/Daily STEAM Challenges</u>	53
<u>Tween & Teen Summer BINGO</u>	56
<u>DIY Paint Brushes for STEAM Saturday</u>	61
<u>Egg Carton Geode for STEAM Saturday</u>	63
<u>Puffy Slime for STEAM Saturday</u>	64
<u>Balloon Car for STEAM Saturday</u>	65
<u>Chocolate Chip Cookies for STEAM Saturday</u>	67

Sock Bowling

Line 'em up and knock 'em down in this fun, interactive bowling activity!

PROGRAM CATEGORY: Craft, physical activity

PROGRAM DELIVERY (FOR STAFF USE ONLY): Can be either pre-recorded or delivered live via your library's Facebook page, Instagram page, or YouTube account.

INSTRUCTIONS (FOR STAFF): Do the "craft" portion of this activity in order to demonstrate how to make the cups look like bowling pins and the balls unique. Set up the pins in the recommended pyramid shape and toss your ball to show the full activity.

AGE GROUP: 4+

TIME REQUIRED: 10-20 minutes

SPACE CONSIDERATIONS: A table/workspace large enough to do craft. Room to gently toss the ball at the cups.

MATERIALS REQUIRED:

- Foam/paper cups
- Red Marker/Sharpie
- Socks (at least 5 indiv.)

INSTRUCTIONS:

1. Make the "pins" first. Take 10 cups and colour two thick red lines all the way around the bottom of each cup.
2. Flip the cups over and stack them in a pyramid, starting with 4 pins on the bottom layer.
3. Make the ball next.
4. Roll one sock in on itself before wrapping the next sock around the lump.
5. To finish off the ball, wrap the final sock around the ball and try to mould a ball shape in your hands.
6. (Optional) If using mismatched or old, spare socks, consider decorating the ball with sharpies or stickers, adding 3 dark circles to look like bowling balls!
7. Toss the finished ball at the pyramid, counting one point for every pin that gets knocked off the table. Count 3 points for a "spare" (cleared off in 2 throws). Count 5 points for a "strike" (all pins knocked off in 1 toss).

SUGGESTED BOOKS AND MEDIA:

- *"Bowling Alley Bandit: The Adventures of Arnie the Doughnut"* by Laurie Keller
- *"Pinny the Bowling Pin"* by Leah Ward

CONTRIBUTING LIBRARY: Chinook Arch Library System



Step 1



Step 2



Step 3



Step 4



Step 5

Frisbee Golf

Participants can make their own frisbees before trying their best to win at frisbee golf!

PROGRAM CATEGORY: Craft, Physical Activity

PROGRAM DELIVERY (FOR STAFF USE ONLY): Can be either pre-recorded or delivered live via your library's Facebook page, Instagram page, or YouTube account. Release your score at the same time so children can "compete" against you from home!

INSTRUCTIONS (FOR STAFF): Create the craft. Decorating can happen before or during the delivery. If demonstrating the throwing of the frisbee, have the larger area with boundary markers already set up.

AGE GROUP: 4+ depending on materials

TIME REQUIRED: 20-30 minutes

SPACE CONSIDERATIONS: A table/workspace large enough to do the craft. A large open area for the activity.

MATERIALS REQUIRED:

- Paper plates
- Markers/Sharpies/Paint (optional)
- Stapler/Staples
- Decorations (Stickers/Sparkles/Glitter/etc.)
- Craft Tablecloth
- Small, soft ball (sock balls work perfect) or something else to mark the "goal" area.
- Boundary "markers" (can be any suitable item such as extra shoes or other outdoor clothing items, rope, books, tape, etc).

INSTRUCTIONS:

1. Spread the tablecloths over the craft surface. Lay your various decorating tools out on your table.
2. Each participant gets two paper plates (foam is an option but does not travel as far as paper plates).
3. Have children decorate both sides of their plates as much as they'd like. This often varies the timing of the craft.
4. Once done, let dry before using to play the game.
5. Staple both paper plates together to form a heavier frisbee (with the decorated sides facing out) OR use both plates as different frisbees to allow more turns of play.
6. The participant tosses the small foam/sock ball in any direction they want.

7. From where the ball landed, set up boundary markers at increasing distances. The closest boundary to the ball receives the highest points, and the farthest away receives the fewest points.
8. From behind the farthest boundary, participants toss the frisbee in the direction of the ball, with the aim to get as close to the ball as possible.
9. Count the points for each throw. Do three throws a round.
10. At the end of each “round”, add the points to the total so far. (Have the participants try to do the addition!)
11. Decide how many rounds make a game. Participants can compete against their previous scores, parents/caregivers scores, fellow participants scores, or even their *librarians* scores!

SUGGESTED BOOKS AND MEDIA:

- *“Home Run, Touchdown, Basket, Goal! Sports Poems for Little Athletes”* by Leo Landry
- *“The Ultimate Sport: A Children's Book about Ultimate Frisbee”* by Allison Wallace

CONTRIBUTING LIBRARY: Chinook Arch Library System



Step 3



Step 6



Step 8

Olympic Flags

Kids will create their own team flag for the SRP Olympics!

PROGRAM CATEGORY: Craft

AGE GROUP: 4+ depending on materials

PROGRAM DELIVERY (FOR STAFF USE ONLY): Can be either pre-recorded or delivered live via your library's Facebook page, Instagram page, or YouTube account.

INSTRUCTIONS (FOR STAFF): Do the craft. You may wish to test the painter's tape on your paper prior to delivery in order to ensure it does not tear the "flag".

TIME REQUIRED: 10 minutes

SPACE CONSIDERATIONS: A table/workspace large enough to do the craft.

MATERIALS REQUIRED:

- Paper (thick/stiff is better) or a small canvas
- Colouring supplies (Markers/Paint/Crayons/etc)
- Painter's Tape
- Decorations (Stickers/Sparkles/Glitter/etc.)
- Popsicle sticks or medium-sized sticks from outdoors (optional)
- Craft Tablecloth

INSTRUCTIONS:

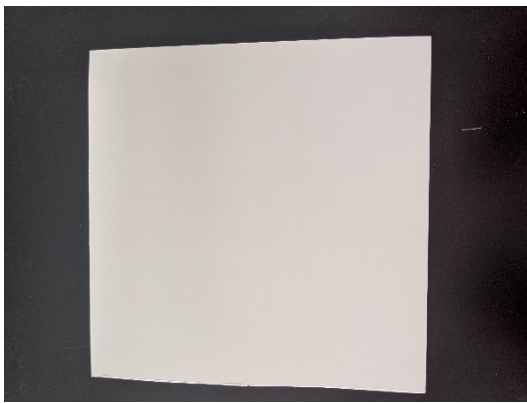
1. Spread the tablecloths over craft surface. Lay your various decorating tools out on your table.
2. Each participant gets a piece of paper or small art canvas.
3. Use the painter's tape to create a design/pattern on the "flag"—leaving much white space.
4. Colour in each section of the "flag" that is not covered by tape.
5. While drying, have the children brainstorm their "nation's" names!
6. Once dry, remove tape from the "flag" as carefully as possible, leaving a unique design.
7. If desired, tape the chosen stick onto one short edge of the flag (for canvas flags: large, flat popsicle sticks work best).

8. As an added (optional) activity, have the participants take a picture holding their flag each time they finish a book. Keep a tally and then create a collage/slideshow at the end of the summer marking their reads for their very own SRP Summer Olympics!

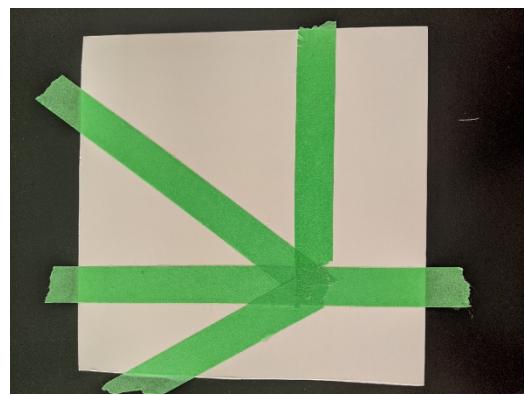
SUGGESTED BOOKS AND MEDIA:

- *“Mr. Lemoncello's Library Olympics”* by Chris Grabenstein
- *“The Wildest Race Ever: The Story of the 1904 Olympic Marathon”* by Meghan McCarthy
- *“The Dragon Games!”* by Jaden Kent

CONTRIBUTING LIBRARY: Chinook Arch Library System



Step 2



Step 3



Step 4



Step 6



Step 7

Coin Hockey

Can you score the best shot? Find out with this easy, accessible game of coin hockey!

PROGRAM CATEGORY: Physical activity, tabletop game

PROGRAM DELIVERY (FOR STAFF USE ONLY): Can be either pre-recorded or delivered live via your library's Facebook page, Instagram page, or YouTube account.

INSTRUCTIONS (FOR STAFF): Use the tape to design the layout of "the rink" on a tabletop. Set up the goal at one or both ends of the "rink". Demonstrate the rules.

AGE GROUP: 4+

TIME REQUIRED: 10 minutes

SPACE CONSIDERATIONS: A table/workspace large enough to do activity.

MATERIALS REQUIRED:

- Table (or a clean, smooth floor)
- Coins for "sticks" and "pucks"
- Tape
- Timer (Optional)

INSTRUCTIONS:

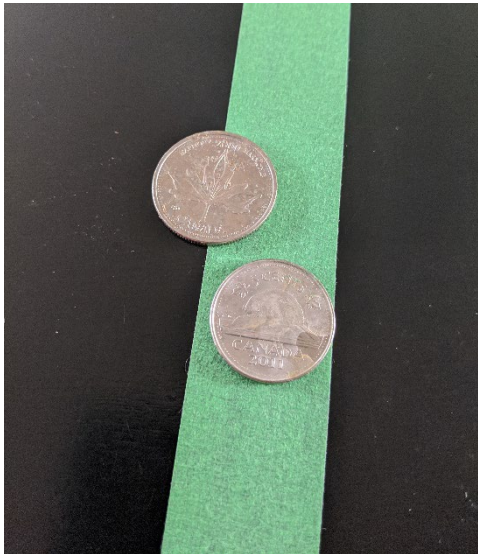
1. Each participant is given a coin as their "stick".
2. Establish which coin is the "stick" and which is the "puck". Try using a smaller sized coin for the "puck". Have several "pucks" ready for the start of the game.
3. Tape out the centre line and goal(s) on the table or floor.
4. Have the "referee" decide which shots count as in or out before starting the game (ie: does touching the goal line count as in?).
5. Using one finger, slide the coin (stick) along the table to tap the other coin (puck) forward.
6. The player tries to tap the "puck" across the center line with only one push.
7. Once across the center line, start counting how many taps with the "stick" it takes to get the puck into the goal.
8. The final shot must be taken from behind the designated goal crease area.
9. If the "puck" doesn't cross the center line to begin, slides off the table or out of bounds, or if the final shot does not make it into the goal, it's no longer in play and is removed.
10. If the shot makes it in, make a tally of how many "shots" it took. If it misses the goal, do not count.
11. Continue in this way until either the time runs out or the allotted "pucks" run out.
12. The "referee" counts how many "pucks" made it into the goal.

13. To add a bit of math to the wrapping up of the game, have the participants average out their shooting score—the amount of taps it took from the centre line to making it into the goal for each “puck” in the goal added together, divided by the amount of pucks.
14. The lower the average, the better. Participants can compete against their own score, their librarian’s score, or their fellow participants score!

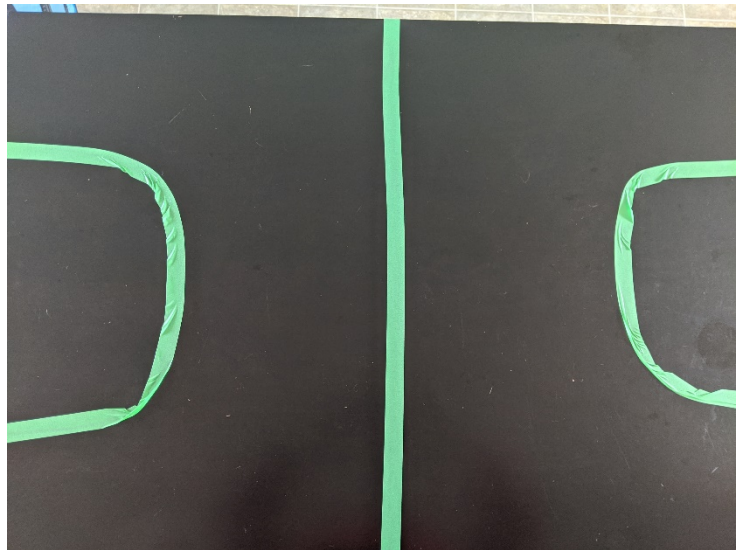
SUGGESTED BOOKS TO READ:

- *“Hayley Wickenheiser”* by Lorna Schultz Nicholson and D.A. Bishop
- *“I Can Read Hockey Stories: Hayley's Journey”* by Sarah Howden and Nick Craine
- *“Let's Play a Hockey Game!”* by Kari-Lynn Winters and Helen Flook

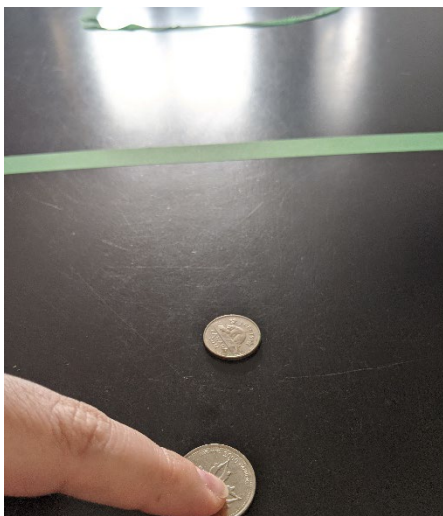
CONTRIBUTING LIBRARY: Chinook Arch Library System



Step 1/2



Step 3



Step 5/6



Step 8

Coding a Maze

Learn the basics of coding language as you guide a small figurine through a paper maze, and then try out your new coding skills on the computer

PROGRAM CATEGORY: An activity (game) that can be completed offline

AGE GROUP: 6-8 years old

TIME REQUIRED: 30-45 minutes

NO STAFF INSTRUCTIONS PROVIDED.

SPACE CONSIDERATIONS: (indoor activity) Participants will need access to tables and enough space to spread out the coding printouts. If the computer coding portion of this activity is included, all participants will also need access to a computer or tablet (individually or shared in small groups).

MATERIALS REQUIRED:

- Paper for printing maze templates
- Paper for printing coding commands
- Characters (figurines similar in size to a LEGO person)
- LEGO or DUPLO (optional)
- Computers or tablets (optional)

INSTRUCTIONS: https://tdsrcstaff.cdn.prismic.io/tdsrcstaff/bdf04839-01d6-4389-8d57-3e6629842077_Coding+a+Maze.pdf

PREPARATION:

- Print several copies of the coding commands—about one copy for every two participants
- Separate the coding commands by cutting along the grey lines
- Print out maze templates, one for each participant

IMPLEMENTATION:

Optional: Participants can add LEGO or DUPLO to the grey parts of the printed mazes

HAND OUT MAZE 1

1. Introduce the concept of “sequence”:
2. Code must be written in a specific order called a sequence
3. Just like a story wouldn’t make sense if the sentences were re-arranged in the wrong order, code won’t work if it’s written in the wrong sequence
4. This applies to the maze and also to coding more generally
5. For this maze, hand out the following pre-cut coding instructions: Go Forward, Turn Right, Turn Left, End

6. Participants need to create a long list of the instructions that they think the character needs to follow to reach the end of the maze
7. The character must avoid the grey areas of the maze and only stay on the white squares
8. Once participants have organized their list from top (first command) to bottom (final command), place the character at the start of the maze
9. Another participant, staff or a caregiver can check the code by moving the character and following the instructions in the list
10. Flip over each command as it is completed
11. Participants can make corrections as needed—young children often need corrections on left and right turns, as they must think about the turns from the characters' perspective

HAND OUT MAZE 2

12. Introduce the concept of "loops":
13. This is when you want to repeat steps in a sequence
14. Rather than piecing together three separate "move forward" commands, children can learn to use the code "for the next _ steps, move forward," filling in the blank space with the amount of steps needed
15. Hand out the following pre-cut coding instructions: Go Forward, Turn Right, Turn Left, For ___ Steps, End
16. Participants need to create a long list of the instructions that they think the character needs to follow to reach the end of the maze o It's a good habit to start indenting the line of code underneath the loops—this is required by some computer coding languages, and it also makes the language much more readable
17. Once participants have organized their list from top (first command) to bottom (final command), place the character at the start of the maze
18. Another participant, staff or a caregiver can check the code by moving the character and following the instructions in the list
19. Flip over each command as it is completed
20. Participants can make corrections as needed

HAND OUT MAZE 3 (Note: a more advanced concept; for older children)

21. Introduce the concept of "if-then-else" statements:
22. These will enable kids to think about writing as short a program as possible
23. An if-then-else statement is comparable to answering a true or false question—if the answer is true, a certain action occurs; if the answer is false, another action occurs
24. To get their character to walk in a straight line, participants could come up with the following code: "If > there is no wall > in front of me > go forward"
25. Hand out all of the coding instructions: Go Forward, Turn Right, Turn Left, For ___ Steps, If, Else, Else If, There is a Wall, There is Not a Wall, In Front of Me, To My Left, To My Right, On All Three Sides
26. Participants need to create a long list of the instructions that they think the character needs to follow to reach the end of the maze
27. There are many possible codes that can be written based on these options

28. Allow participants to experiment with the different options and see if they can write a variety of code to get their character to the end of the maze
29. There are many ways to get the character from start to finish, so keep on experimenting with different codes
30. Once participants have organized their list from top (first command) to bottom (final command), place the character at the start of the maze
31. Another participant, staff or a caregiver can check the code by moving the character and following the instructions in the list
32. Flip over each command as it is completed
33. Participants can make corrections as needed

If you have access to computers or tablets for the program, or if you would simply like to encourage participants to practice their coding after the program, try out the ten challenges on maze blocky, which is a comparable exercise to the printed maze the kids have just completed

SUGGESTED BOOKS TO READ:

- *“Awesome Minds: Video Game Creators”* by Alejandro Arbona
- *“How to Code a Sandcastle by Josh Funk I’m a JavaScript Games Maker: The Basics”* by Max Wainewright

CONTRIBUTING LIBRARY: Northern Lights Library System

Marble Maze Madness

Recycle plastic straws to create your own 3D maze and challenge your friends and family to solve it!

PROGRAM CATEGORY: Craft/STEM activity

PROGRAM DELIVERY (FOR STAFF USE ONLY): This program can be explained via any media platform, as the concept is fairly straightforward and can be as simple or complex as the child wants.

INSTRUCTIONS (FOR STAFF): Recording an online tutorial video or creating an example project may help children to visualize the steps as well as the finished maze.

AGE GROUP: 6+ and can be adapted for complexity.

TIME REQUIRED: About 60 minutes from start to finish. Time will vary with complexity of maze design

SPACE CONSIDERATIONS: This is an indoor program that requires little space.

MATERIALS REQUIRED:

- Cardboard (We used a piece roughly 8.5x11")
- Scissors
- White glue or hot-glue gun
- 10-20 plastic straws
- Pencil
- Colored paper (optional)
- Markers (optional)
- Marbles

INSTRUCTIONS:

1. Sketch out a rough design for your maze on the coloured paper. (If you chose not to use coloured paper, draw your maze directly on the cardboard base). Remember to make sure your maze will comfortably fit a marble, taking into account the width of the straws. It's also important to check to make sure your maze is solvable. How easy or hard it is is up to you!
2. If you chose to use coloured paper for the "floor" of your maze, glue it securely to your cardboard base to make it sturdier.
3. Starting with the outer edges, cut and glue straws to make the walls of the maze, following your sketch. Make sure that your maze has an entrance, exit, and a border to stop the marble from falling off the edges. Make sure to run your marble through it periodically as you go to ensure it fits easily around corners, down aisles, etc.
4. Once your maze is done, try to solve it by guiding the marble through the maze by holding the maze by its cardboard base and tilting it gently to move the marble. Challenge your family to solve your 3D maze and see who can get to the finish line fastest!

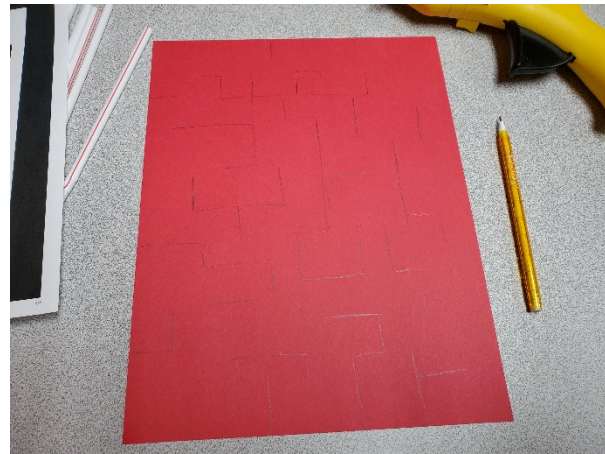
SUGGESTED BOOKS AND MEDIA:

- *“The Gardener’s Maze”* by Dot Meharry (read aloud on Youtube: <https://youtu.be/b-WG-xcWckI>)
- *“Bird and Squirrel All Tangled Up”* by James Burks
- *“Frida and the Bear Play the Shape Game”* by Hanne Bartholin and Anthony Browne

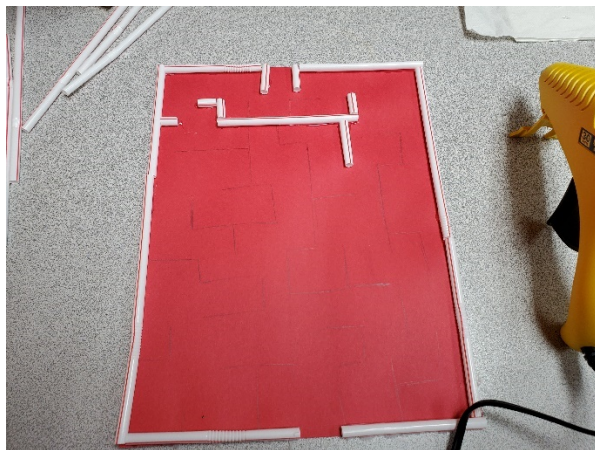
CONTRIBUTING LIBRARY: Valleyview Municipal Library



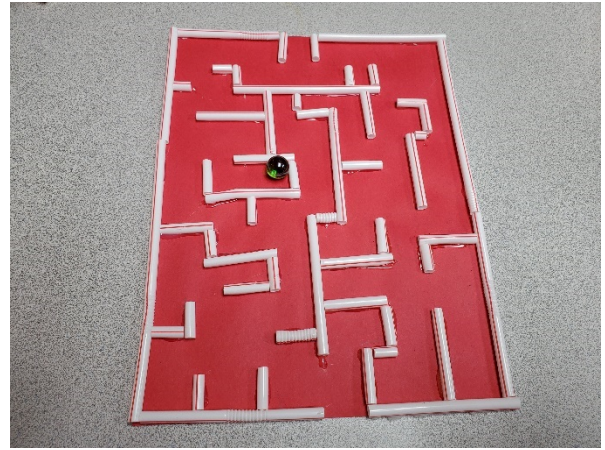
Supplies



Step 1



Step 3



Step 4

Rubber Band Powered Car

Do you love to race toy cars? Make your own rubber band powered car and see how fast & how far it will go!

PROGRAM CATEGORY: Science / craft / game – has to be made with physical materials but directions or results can be shared online.

PROGRAM DELIVERY (FOR STAFF USE ONLY): Directions should be recorded and posted (website, social media, YouTube – whatever your patrons are accessing) so that they can be accessed / replayed as needed. Could be livestreamed or in a video chat in addition for a more interactive experience. Comments while livestreaming or video chat allow for brainstorming & problem solving with the patrons.

INSTRUCTIONS (FOR STAFF): Practice first! Make your own car so that you can experience the process and see what types of problems could occur – if you are doing an interactive program (livestreamed or video chat), this will help you better brainstorm & problem solve with patrons. Learn a little about the science behind how the car works (potential energy / elastic potential energy, kinetic energy, friction) – be sure to explain the scientific concepts behind what you are doing! If you are preparing materials (craft kits, etc.) for the patrons, you may want to pre-cut the hole in the bottom of the box and punch the holes in the side of the box. Do not flatten the boxes as this decreases the strength of the box – jello or macaroni & cheese boxes work best. Try to do the least damage to these boxes when opening them. The end that was opened will need to be taped shut again.

AGE GROUP: age 6+ (adult assistance may be needed with cutting & making elastics behave!)

TIME REQUIRED: 30 min (from scratch with decorating) – 10 min (box prepared, minimal décor)

SPACE CONSIDERATIONS: Just at the table. Moving to the floor to test / race the car.

MATERIALS REQUIRED: Per child / car

- 1 cardboard box (jello or macaroni & cheese or similar best – not flattened)
- 4 milk jug lids (soft plastic best)
- 1 popsicle stick (half sized – short – popsicle stick best)
- 2 bamboo skewers
- 5 elastics (regular type – can include extra elastics in case of snapping)
- Paint or any type of decorations desired

INSTRUCTIONS:

(You do not need to turn the box inside out as in the picture – that's just something I tried. Also, I took apart my already constructed car which is why you see decorations, etc in the photos.)

1. Create an opening: Cut a rectangle out of the bottom of the box – leaving about one inch of the bottom of the box intact at each end. (This allows for more stability of the body of the car.)

2. Punch axle holes: Using a single hole punch, create the four holes for the two axles to go through on the sides of the box. Make sure the two holes for each axle line up with each other. The holes should line up to about the middle of the one inch section we left intact at each end of the box.
3. Prepare the anchor: Create a slit for the popsicle stick in both the top & bottom of the box (car body). This slit should be between the end of the box and the placement of the axle (you may want to put an axle in the holes just to make sure of your slit placement). Insert the popsicle stick to make sure the holes work. Remove the popsicle stick (and axle).
4. Decorate the body of the car if desired – this is a good point at which to paint. The car can always be decorated later, but it may be easier to do this without the axles or tires attached.
5. Prepare the tires: Using something pointy (ex. end of bamboo skewer, or thin screwdriver, or pen) poke a small hole in the middle of each of the milk jug lids. Do not make the holes very large – they will need to fit snugly against the axles.
6. Prepare the axles: You will probably need to shorten the axles. They should extend about an inch past the box on each side when inserted into the axle holes.
7. Anchor the elastic: Cut one elastic so that it is a straight line. Tie one end of the elastic to the popsicle stick. Insert the popsicle stick into the slits so that the elastic is inside the box. (Put one end of the stick into one slit from the inside of the box, slide the popsicle stick down until you can insert the other end of the popsicle stick from inside the box. You may have to roll the elastic up and down the popsicle stick to facilitate this process.)
8. Tie the elastic to the axle: Tie the loose end of the elastic to one of the axles (the axle does not need to be inserted into the axle holes for this). You want to tie it so that the elastic has no slack, but in fact is a bit taut when the axle is inserted into the axle holes that are farthest from the popsicle stick anchor. The knot must also be very tight against the axle – if it is not, you will not be able to generate any power with the elastic. Insert the axle into the axle holes.
9. Attach the tires: Insert the other axle into the axle holes. Attach the “tires” (milk jug lids) to the axles. The tires should not be right against the body of the car.
10. Finish the tires: Wrap a rubber band around each tire. This gives the car traction when it tries to move across the surface.
11. Test your car: Push down gently on the car and pull the car back along the ground. Release! The car should travel forward. If this is not working, turn the car around and try the same thing again. If this is still not working, check that the elastic is tied tightly against the axle. The elastic may need to be tightened from time to time with excessive play.

SUGGESTED BOOKS AND MEDIA: Any non-fiction books about cars! Any books about cars from the movie “Cars” – or the “Cars” movie itself. Any stories with cars in them!

- Non-fiction (on Hoopla) – “*Amazing Rubber Band Cars*” by Mike Rigsby

- Non-fiction (on Hoopla) – “*The Inventor’s Secret: What Thomas Edison Told Henry Ford*” by Suzanne Slade)
- Elastic Potential Energy YouTube Video: <https://youtu.be/rLgfeKbTBI>
- Kinetic & Static Friction Forces YouTube Video: <https://youtu.be/CTLXubXOTUQ>
- Types of Friction (including rolling friction) Article: https://www.school-for-champions.com/science/friction_types.htm#.XrlbeKhKg2x

CONTRIBUTING LIBRARY: Drayton Valley Library



Supplies



Step 1/2



Step 3a



Step 3b



Step 3c



Step 4



Step 5



Step 6



Step 7a



Step 7b



Step 8a



Step 8b



Step 9



Step 10



Step 11



Finished Product

Monster Magnets

Great for Halloween decorations or every day fun! Stick these cute magnetic monsters to any metal surface to hold notes, photos and more! A table/workspace large enough to do craft will be required-somewhere close to an outlet if using a hot glue gun.

PROGRAM CATEGORY: Craft, Monsters

NO STAFF INSTRUCTIONS PROVIDED.

AGE GROUP: Ages 4+ (with adult assistance)

Supplies:

- Popsicle Sticks
- Magnets (old ones can be cut into pieces and used)
- Googly Eyes
- Coloured Paper
- Scissors
- Paint and/or Markers
- White Glue
- Hot Glue (For popsicle sticks)

Optional supplies for decorating:

- Feathers
- Glitter
- Pipe Cleaners
- Stickers
- Ribbon
- Anything else you can think of!

INSTRUCTIONS:

1. Lay out your popsicle sticks that are going to be the base for your magnet (Fig. 4). Take two more popsicle sticks- lay one diagonally across the sticks you have laid out (Fig. 5). Take the second popsicle stick and carefully break it in half. Lay the two broken pieces diagonally the opposite direction of the first popsicle stick (Fig. 6). These diagonal popsicle sticks need to be hot glued to your magnet base to make it sturdy.
2. When you have the base prepared, you can hot glue your magnet to the back along the diagonal sticks (Fig. 7).
3. After the glue has cooled you can flip over your magnet and decide whether you are going to paint it or colour it with markers (or not colour it at all!) (Fig. 8)
4. Next, after the paint/marker is dried, add your googly eyes, arms, horns/spikes, and mouth/teeth (Fig. 9). Remember to be as creative as you want! Coloured paper works well for cutting out arms/horns/spikes/mouth/teeth. Pipe cleaners also work well for making bendy arms and legs! (Fig. 10)

5. Now you can add any final touches! Add feathers, glitter, stickers or anything else you want to your Monster Magnet! Make it as silly or scary as you like! (Fig. 11, 12 & 13)

SUGGESTED BOOKS AND MEDIA:

- *Monsters Inc.* (Movie)
- *“Monster Trouble”* by Lane Fredrickson
- *“The Monster in the Backpack”* by Lisa Moser

CONTRIBUTING LIBRARY: Beaverlodge Public Library



Supplies



Step 1



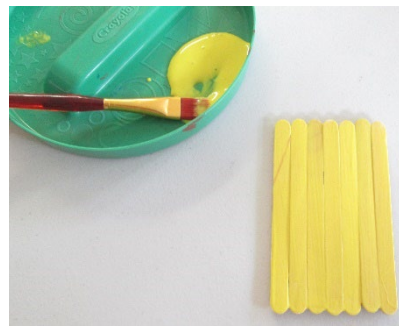
Step 2



Step 3



Step 4



Step 5



Step 6



Step 7



Step 8



Step 9

Let's Play Some Basketball

Can you score a 3 pointer? Test your skills out on your own mini basketball court! This craft is fun to make and exciting to play with.

PROGRAM CATEGORY: Craft and table activity.

PROGRAM DELIVERY (FOR STAFF USE ONLY): This program works best as a pre-recorded program, but it can also be delivered live.

INSTRUCTIONS (FOR STAFF): Only show the process for one basketball hoop and have the second one finished before the start of the program. Pre-colour the hoop and net (plastic cup) before you record.

AGE GROUP: 6+ with parental assistance on some of the cuts.

TIME REQUIRED: 15 – 30 minutes per basketball net.

SPACE CONSIDERATIONS: A table/workspace to work on.

MATERIALS REQUIRED:

- Cardboard
- Paperboard
- Two plastic cups* (Ideally clear)
- 14 straws*
- Red and black sharpie
- Glue or tape – a hot glue gun works well IF you are comfortable with one
- Scissors
- Ping pong ball

*Half the supplies are needed if you want one basketball net

INSTRUCTIONS:

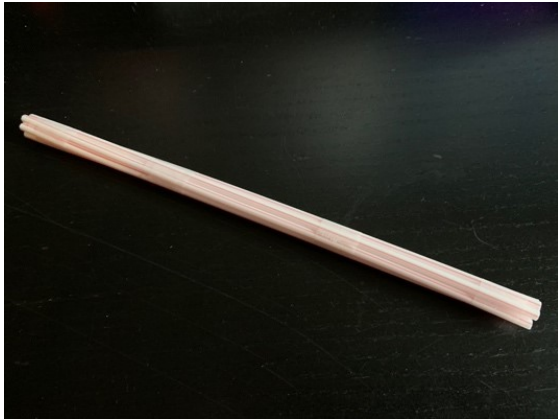
1. Tape seven straws together in a tightly packed cylinder and make sure that they are level on one end.
2. Create the backboard. To do this, cut a piece of paperboard into a small rectangle that is at least three inches tall and around six inches wide. Wrap this in white paper and tape the paper to the paperboard.
3. Cut your plastic cup in half, then color the rim red or orange. To create the net, use a black sharpie and draw in a crisscross pattern.
4. Tape or glue the plastic cup's rim to the lower portion of the back board. If the plastic cup is not sitting at a 90-degree angle with the backboard, add some paperboard between the cup and backboard below the rim. This should hold the cup at a 90-degree angle.
5. Draw a square over the net on the backboard. You can get creative and decorate the backboard however you like.

6. Tape or glue the backboard to the top inch of the straws. Avoid taping the backboard to the level end of the straw pole. If you use glue, make sure it dries before you continue.
7. Tape or glue the bottom end of the straws to a piece of cardboard that is six by six inches. If you only want one basketball net, you can finish here.
8. Repeat the above steps for a second net.
9. Tape both finished basketball nets on opposite sides of a large piece of cardboard and decorate it to look like a basketball court.

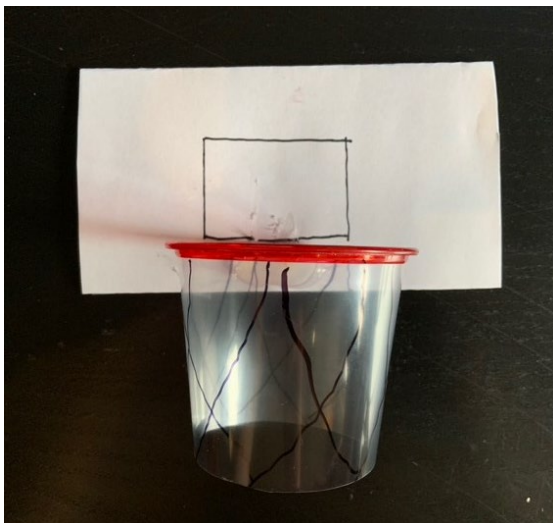
SUGGESTED BOOKS AND MEDIA:

- *"Dino Basketball"* by Lisa Wheeler
- *"Salt in his shoes: Michael Jordan in pursuit of a dream"* by Jordan Deloris
- *"Jimmy's boa and the bungee jump slam dunk"* by Trinka Hakes Noble

CONTRIBUTING LIBRARY: Marigold Library System



Step 1



Steps 2 - 5



Finished Basketball Net

Make Some Noise!

Learn how to play different rhythms with your own snare drum!

PROGRAM CATEGORY: Craft and Musical Activity.

PROGRAM DELIVERY (FOR STAFF USE ONLY): This program can be pre-recorded or live streamed.

INSTRUCTIONS (FOR STAFF): Prepare the string with beads so that you don't have to thread it during the demonstration. Follow the patron instructions.

AGE GROUP: 5+ with parental assistance.

TIME REQUIRED: 15 – 30 minutes.

SPACE CONSIDERATIONS: Table/workspace to work on.

MATERIALS REQUIRED:

- Tin can
- Packing tape
- Medium to large balloon
- 3 or 4 elastic bands that fit tightly around the tin can
- Beads
- String
- Scissors

Optional:

- Any craft supplies to decorate the snare drum

INSTRUCTIONS:

1. First remove both ends of your tin can so that it is a tube.
2. Next, Take the packing tape and pull it across one end of the tin can until one end is completely covered. Make sure that the tape is pulled across the cans opening as tightly as possible. If the tape is not tight the drum won't work properly.
3. Once there is a tight seal on one side of the can it is time to cut the balloon so that it can cover the other end. To do this, take a medium to large balloon and cut off the first inch of the balloon.
4. Cover the opening of the tin can with the balloon. If you can't pull the balloon over the can, cut a bit more of the balloon so that there is a slightly larger opening and try again. Make sure that you pull the balloon as tight as you can without breaking it so that the balloon is completely flat over the opening of the tin can. If this step doesn't work you may need a larger balloon.
5. Once the balloon is on the tin can take two rubber bands that fit tightly around the tin can and wrap them around the part of the balloon that is on the sides of the tin can.

6. To create the snare, pick your favorite small beads and thread them on a string. Make sure that there are enough beads to cover $\frac{3}{4}$'s of the diameter of the tin can. Tie off the two ends of the string with a bead on each side. When the snare is pulled over the drum the two beads should go about one inch to one and a half inches past the edge of the tin can.
7. Take another two rubber bands and put them slightly higher than the edge of the balloon. Pull the thread under the rubber band and have one bead on the opposite side of the snare. Do this on opposite sides of the drumhead so that the snare can be pulled tight across the drumhead.
8. At this point if you want to decorate the snare you can cover it in paper and decorate it. Make sure that the two beads on each end of the snare string are accessible.
9. Add a string, yarn, or whatever you prefer as a strap for the snare. You can use this to hang the drum from your neck, making it easier to play.
10. Pull the snare strings tight to turn on the snare or loosen them slightly to turn them off.

SUGGESTED BOOKS AND MEDIA:

- *"Dance of the Violin"* by Kathy Stinson (available on tumblebooklibrary.com)
- *"The First Music"* by Dylan Pritchett (available on tumblebooklibrary.com)
- *"Punk Farm"* by Jarrett J. Krosoczka

CONTRIBUTING LIBRARY: Marigold Library System



Foosball Fun

With Foosball Fun! you can finally have the foosball table you have wanted!

PROGRAM CATEGORY: Craft and activity.

PROGRAM DELIVERY (FOR STAFF USE ONLY): This program should be pre-recorded.

INSTRUCTIONS (FOR STAFF): Prepare most of the craft supplies. When delivering the program you should try to refrain from too much repetition, so editing your video will be important.

AGE GROUP: This program is best suited for 6+ with parental supervision and assistance or 8+ without. Be aware of your own child's skill level with scissors or knives – everyone is different making the age range flexible.

TIME REQUIRED: 1 Hr +

SPACE CONSIDERATIONS: A table/Workspace to work on.

MATERIALS REQUIRED:

- A good pair of scissors or ideally an x-acto knife (parent use only)
- Markers
- Cardboard box or shoe box
- Clothing Pins
- Wooden dowels*
- Tape or Glue
- Anything that you want to decorate the clothing pins and foosball table with
- A hole punch – suggested but NOT required

*Other possible supplies are straws, cardboard tubes, or any cylinder that is long enough

INSTRUCTIONS:

1. If you don't have a shoe box, cut a cardboard box so that it about the same size as a shoe box. Make sure that the box you use is an inch taller than the cloth pins.
2. Punch or cut out holes that are the size of the wooden dowel or straws that you plan to use. The holes should be about the same distance away from the end as the length of the clothing pins.
3. Cut two more holes on each side so that there are a total of four holes on each side. They should be evenly placed inside the holes used for the goalies.
4. Cut out squares on each end of the box for the goals. They should be tall enough for the ball to fit under and as wide as you want. The best width is just enough for the ball to pass the goalie on either side.
5. At this point you can decorate your foosball table however you want. Use a green pieces of construction paper as the field.
6. Next, cut four dowels or tape together straws to make four 1'6" rods. Put these rods through the four holes that you cut into the cardboard box. IMPORTANT – kids should

not cut the wooden dowels to size. Adult assistance is required at this step if you use wooden dowels.

7. Finally, attach the clothing pins to the rods. There should be 1 pin as a goalie and 2 or 3 pins on the center rods. To prevent the dowels or straws from leaving the holes, test your clothing pin placement before gluing the clothing pins down. Move them side to side, does the rod fall out.

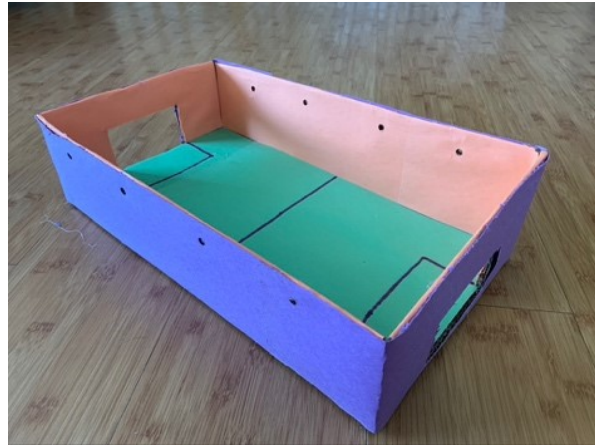
SUGGESTED BOOKS AND MEDIA:

- *"The Great Shape-Up"* by Eleanor May (available on tumblebooklibrary.com)
- *"Dino-Soccer"* by Lisa Wheeler
- *"Soccer Star"* by Mina Javaherbin

CONTRIBUTING LIBRARY: Marigold Library System



Steps 1 - 4



Step 5



Step 6/7

Let's Go Skee Ball

Time to bring the arcade to your own home! Let's Go Skee Ball is a great craft and activity for the whole family.

PROGRAM CATEGORY: A craft and activity.

PROGRAM DELIVERY (FOR STAFF USE ONLY): This program works best as a pre-recorded program.

INSTRUCTIONS (FOR STAFF): Because this program is so long, make sure you edit your video. If there are repetitions in a task - like when you cut the holes for the cups - make sure you don't show every single cut.

AGE GROUP: 7+ with parental assistance on some of the cuts. This program is family friendly and younger kids can help decorate.

TIME REQUIRED: 1 hour

SPACE CONSIDERATIONS: A table to work on and a hallway or open space to play the game.

MATERIALS REQUIRED:

- A good pair of scissors or a knife
- Colorful paint or markers if you want to design the Skee Ball ramp and tower
- Markers
- Two or three cardboard boxes
- Paper
- Duct tape or packing tape
- Paper Cups or Plastic Cups

INSTRUCTIONS:

THE TOWER:

1. Cut the tabs off on one side of a cardboard box so that it is completely open on that side. Once that is done you will cut off one of the short sides of the box at a slight angle. This should result the box sits at an angle when you set it down on the angled edge.
2. Trace the cups with the opening of the cup facing the cardboard box. These will be the outlines for the holes to place your cups in. To cut the holes you will need to make multiple slits inside the outline with a knife or scissors. It should look like a pizza when you are done. Fold down the tabs inside the box, but don't cut them off! Test fit one of your cups and make sure each hole is big enough. This step may require parental assistance for any child not comfortable with a knife or scissors.
3. Once you have cut holes for the cups you will cut out the bottom of the cups. Ask for parental help if you are not comfortable with this. After that you will place the cups inside the holes and tape the cups to the tabs from the last step.
4. At this point the tower for your Skee Ball machine can be used, but I recommend a few more steps.

5. Take a cardboard box that is slightly larger than the first one and cut off one of the short ends.
6. Tape together the tabs so that the sides are extended. Now you can place the box with cups inside the second box and you will have a way to contain some of the balls and prevent balls from bouncing out.

THE RAMP:

7. Cut one corner of a cardboard box and lay it out flat.
8. To create the incline of the ramp, take the tab from both sides of one end and overlap them. The end of the cardboard should lift up into the air. Tape that tabs together with the inclined tab underneath of the flat tab. This should leave one side inclined.
9. Finally tape all the rest of the tabs together while the cardboard is laid out flat. There should be no gaps throughout the length of the cardboard. This will result in the tabs being lifted into the air to create sides for the ramp.

SUGGESTED BOOKS AND MEDIA:

- *“At The Boardwalk”* by Kelly Ramsdell Fineman
- *“Mitchell Goes Bowling”* by Hallie Durand (accessible through tumblebooklibrary.com)
- *“Dino-Baseball”* by Lisa Wheeler

CONTRIBUTING LIBRARY: Marigold Library System



Step 1



Step 2



Step 3



Step 5



Steps 7 - 9

HOMEMADE SIDEWALK CHALK PAINT

Create your own homemade sidewalk chalk paint.

PROGRAM CATEGORY: Craft

PROGRAM DELIVERY: Both livestream or pre-recorded videos work well. Zoom would allow participants to work along with the facilitator, either as a live event, or a pre-recorded activity. Just be sure participants have the material sheet in advance, and have the time to gather the supplies.

INSTRUCTIONS FOR STAFF: If making the paint indoors, cover table with newspaper, or an old tablecloth.

Recommend children wear play clothes. They may get dirty crawling on the ground while painting, and they may get paint on themselves.

Notes: Painting on a flat surface will help prevent it from running off. If you find your paint is too runny, do not be afraid to add more corn starch. The colour will pop and brighten as the paint dries. Add more food colouring or paint for a deeper colour.

Food colouring mixes easy, and is slightly brighter than tempera paint. Although, tempera paint is a great, safe alternative.

This is a creative and fun way to spend some time outdoors. Supplies can be found in most homes.

AGE GROUP: Ages 5+

TIME REQUIRED: 10 minutes to mix, and spend as much time as you want painting outside!

SPACE CONSIDERATIONS: The great outdoors!

MATERIALS REQUIRED:

- 2 cups corn starch
- 2 cups water
- 6 drops food colouring OR 1 tsp tempera paint (6-8 colours)
- Paintbrushes
- 6-8 small plastic cups or muffin tin
- Spoons for stirring

INSTRUCTIONS:

1. Mix corn starch and water in equal amounts.
2. Mix until corn starch is fully dissolved.
3. Pour into plastic cups or small muffin tins.
4. Add desired colour to each cup, then give it one last stir.

SUGGESTED BOOKS AND MEDIA:

- *“Chalk”* by Bill Thomson
- *“Cool Ali”* by Nancy Poydar

CONTRIBUTING LIBRARY: Redcliff Public Library



Make-Your-Own Foam Jersey Bookmark

Participants can make their own jersey bookmark this summer to let their creativity reign while getting a functional “Game On” themed bookmark!

PROGRAM CATEGORY: Craft

PROGRAM DELIVERY (FOR STAFF USE ONLY): Can be either pre-recorded or delivered live via your library’s Facebook page, Instagram page, or YouTube account.

INSTRUCTIONS (FOR STAFF): Do the craft. Have the stencil printed off and pre-cut prior to delivery.

AGE GROUP: 4+ depending on materials

TIME REQUIRED: 10-20 minutes

SPACE CONSIDERATIONS: A table/workspace large enough to do the craft.

MATERIALS REQUIRED:

- Foam coloured sheets
- Markers/Sharpies
- Jersey Stencils (included)
- Scissors
- Decorations (Stickers/Sparkles/Glitter/etc.)
- Craft Tablecloth

INSTRUCTIONS:

1. Spread the tablecloths over craft surface. Lay your various decorating tools out on your table.
2. Each participant gets a foam sheet and a stencil for their jersey.
3. Depending on the age, have children trace and cut out the jersey using the provided stencils, help some children cut out the jersey, or have the children trace the jersey and cut it out for them.
4. Instruct children to write a name across the top accompanied by a number to complete the jersey. (It can be their last/family name, or, they can be creative and choose the name of their favourite book character!)
5. Encourage them to continue decorating it in any way that they want!
6. Once done, let dry before using to mark their page in the book they are currently reading!

SUGGESTED BOOKS AND MEDIA:

- *“Carey Price: How a First Nations Kid Became a Superstar Goaltender”* by Catherine Rondina
- *“The Day Dad Joined My Soccer Team”* by Maureen Fergus and Mike Lowery
- *“I Can Read Hockey Stories: What’s in a Number?”* by Meg Braithwaite and Nick Craine
- *“5-Minute Basketball Stories”* by Sarah Howden and Nick Craine

CONTRIBUTING LIBRARY: Chinook Arch Library



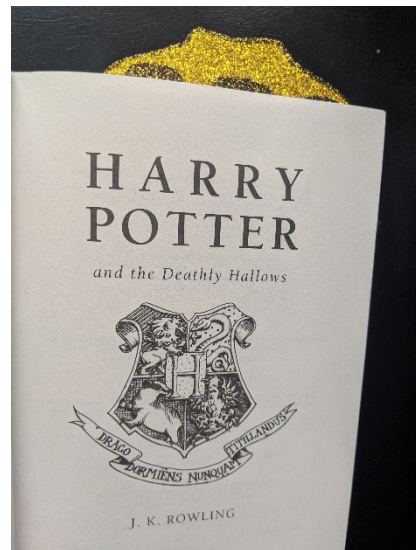
Step 2



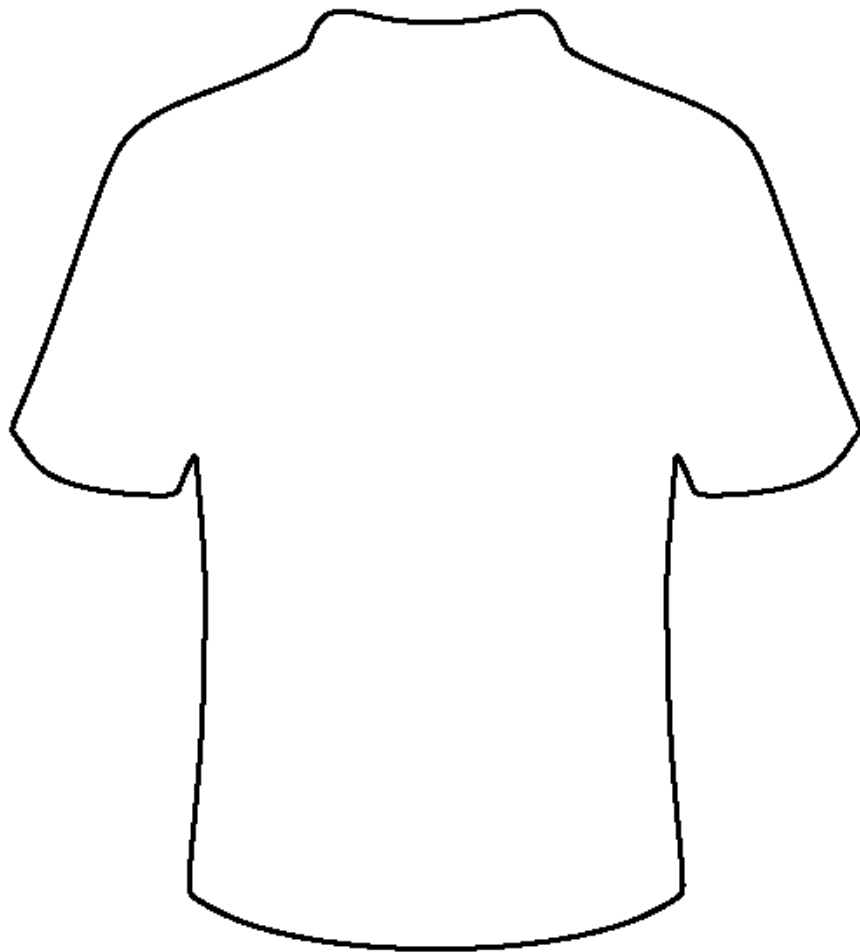
Step 3



Step 4



Step 6



Source: <http://clipart-library.com/clipart/5TRrBb7Xc.htm>
Measurements are for a **5 x 7 in** print out.

Lava Lamp

PROGRAM CATEGORY: Craft, Science

AGE GROUP: Ages 4+ (with adult assistance). Fun for all ages!

TIME REQUIRED: 10-20 minutes

SPACE CONSIDERATIONS: A table/workspace large enough to do the craft. Somewhere you don't mind a mess!

NO STAFF INSTRUCTIONS PROVIDED.

MATERIALS REQUIRED:

- Empty Water Bottle (500ml, with lid)
- Vegetable Oil
- Water
- Food Colouring
- Wooden Skewer/Wooden spoon
- Alka-Seltzer Tablets
- Glitter (Optional, but makes it cooler!)

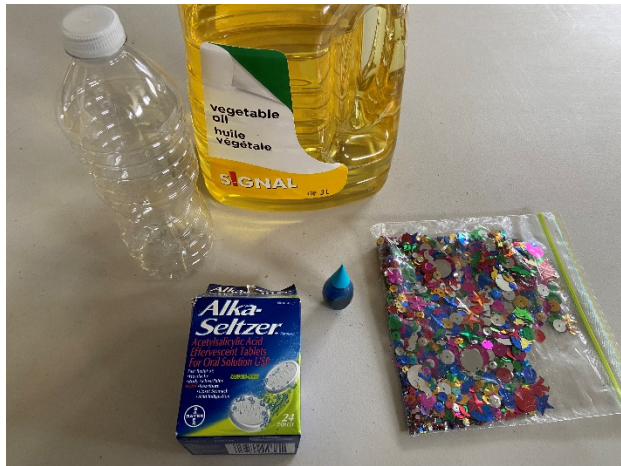
INSTRUCTIONS:

1. Fill the empty water bottle about 2/3 full with vegetable oil.
2. Fill the rest of the bottle with water, leaving a little space at the top (about one-inch). The water will settle to the bottom.
3. Add a few drops of food colouring. If you are adding glitter to your lava lamp, you can do so now.
4. Use a wooden skewer or the handle of a wooden spoon to gently stir the water and food colouring at the bottom of the bottle. We do not recommend shaking the bottle as this causes bubbles to form in the oil and your lava lamp will not work as well.
5. When you are ready for the fun part, break an alka-seltzer tab into four pieces. Drop the tablet pieces into the bottle one at a time.

SUGGESTED BOOKS AND MEDIA:

- *Meet the Robinsons* (Movie)
- "Experiment #256" by Marty Kelley

CONTRIBUTING LIBRARY: Beaverlodge Public Library



Materials



Step 1



Step 2



Step 3



Step 3.5



Finished Product



Step 5

Paper Ornaments

Perfect for Christmas decorations or if you want a lightweight “ball” for indoor play that won’t damage the wall!

CATEGORY: Craft

AGE GROUP: 6+ (with adult assistance)

TIME REQUIRED: 10-15 minutes

SPACE CONSIDERATIONS: A table/workspace large enough to do the craft.

NO STAFF INSTRUCTIONS PROVIDED.

MATERIALS REQUIRED:

(Fig. 1 & Fig. 2)

- 1 sheet of paper
- Template
- Ruler
- Pencil or pen for marking measurements
- Knife

INSTRUCTIONS:

1. Draw your template on your sheet of paper (Fig. 3) and cut your three strips as perfectly as you can (Fig. 4). Trace (don’t cut!) along the curves with a pointy knife (Fig. 5). Glue the bottom of two of your strips (Fig 6) and make two loops (Fig. 7).
2. Put one of your loops into the second (Fig 8). Get your third strip and put it through one of your closed loops (Fig 9). Close this third strip with glue and press until it's dry (Fig. 10).
3. Next couple of steps are a little tricky so take your time. Wiggle all the loops until all the curves face outwards (Fig. 11). Gently press the curved (traced) sections inwards one by one (Fig. 12). Your ornament is finished (Fig. 13).
4. If you want to make your ornament more unique, you can use paper with a pattern on it or if you are using plain paper you could draw your own design on your paper before or after you cut it into three strips. For those of you who like glitter (who doesn’t?) you could add a little sparkle to your ornament when it's finished by gluing some glitter on to your finished piece.

SUGGESTED BOOKS AND MEDIA:

- Tony Diterlizzi’s “*The Broken Ornament*” read aloud on Youtube by PV Storytime: <https://youtu.be/aM1di7h7ypA>
- “*Pass It On*” by Sophy Henn

CONTRIBUTING LIBRARY: Beaverlodge Public Library



Figure 1

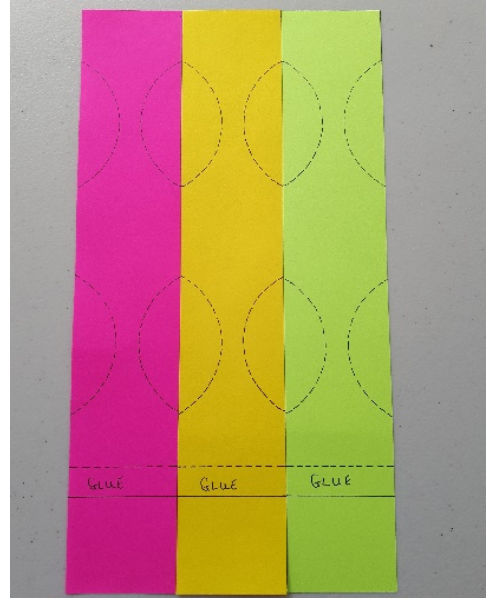


Figure 3

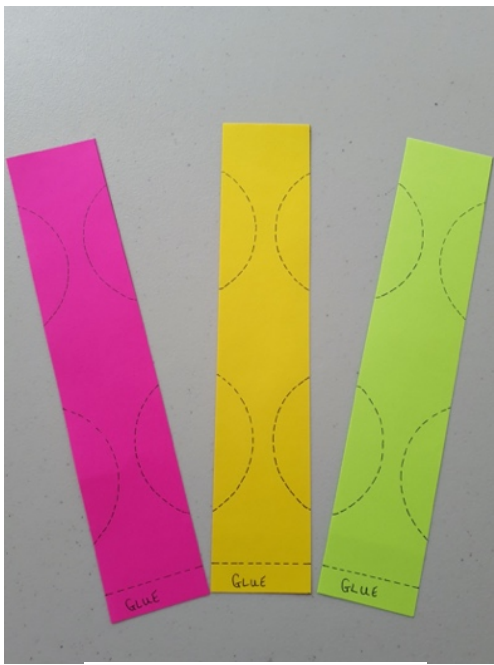


Figure 4

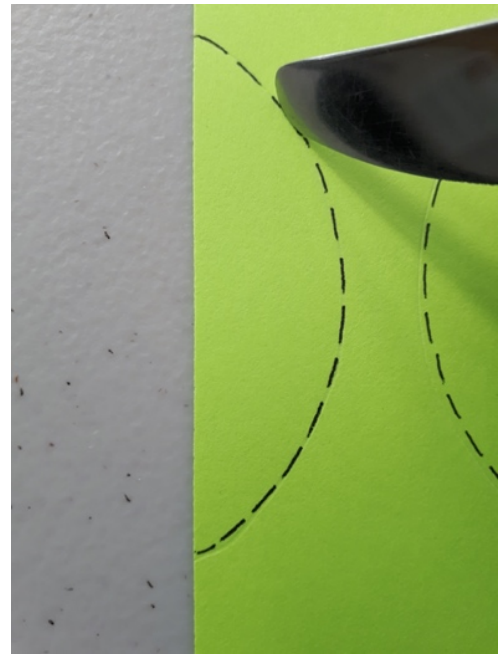


Figure 5

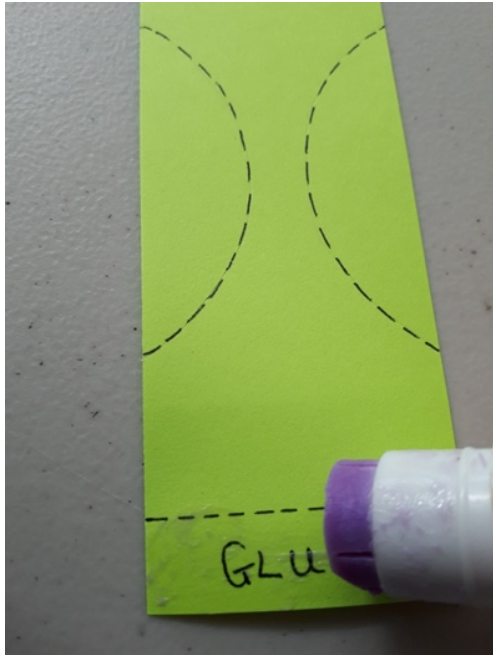


Figure 6

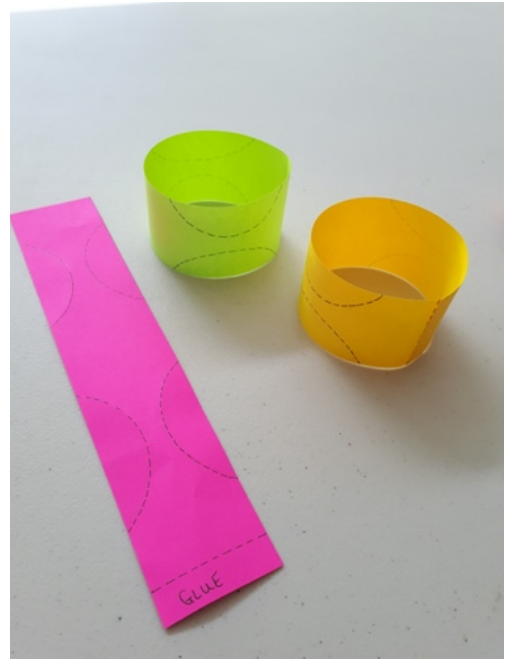


Figure 7

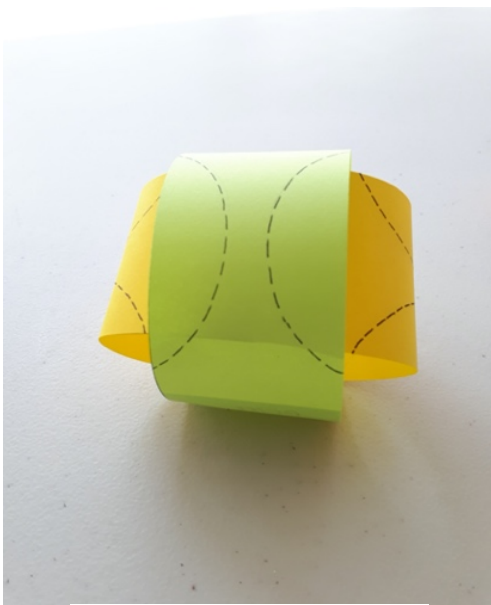


Figure 8

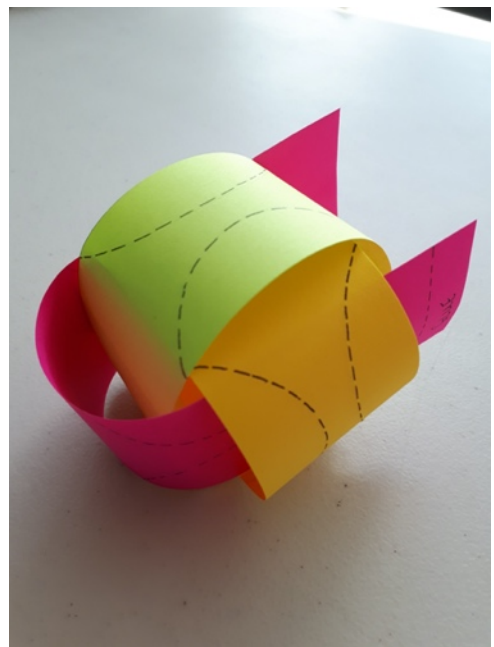


Figure 9

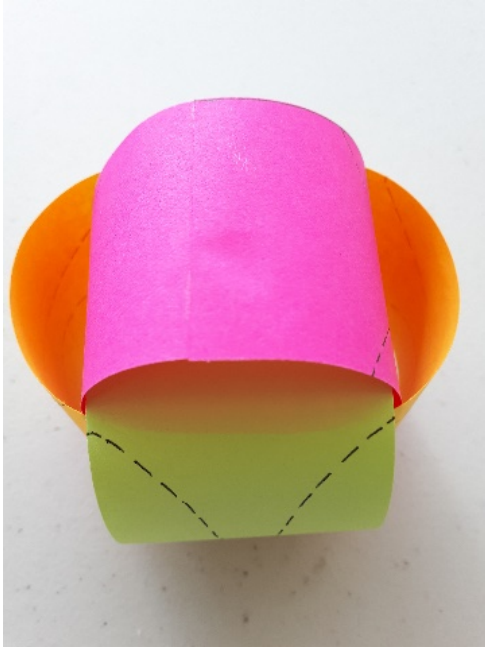


Figure 10

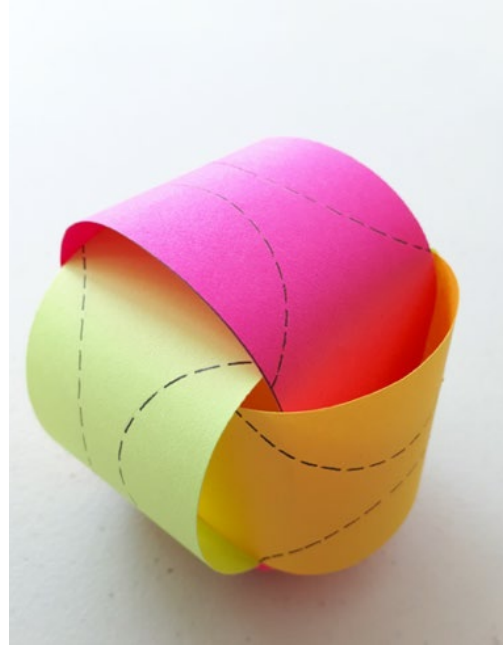


Figure 11

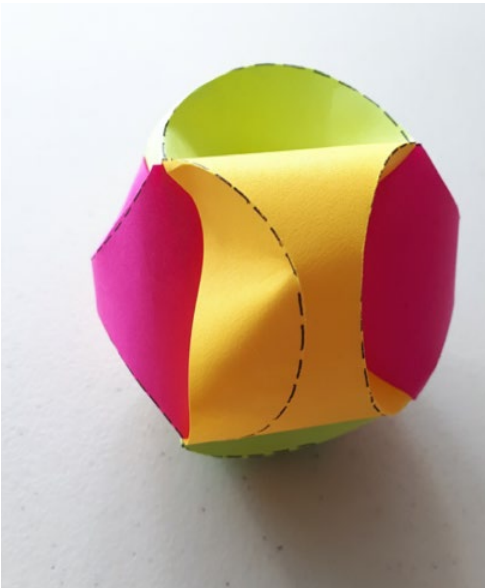


Figure 12

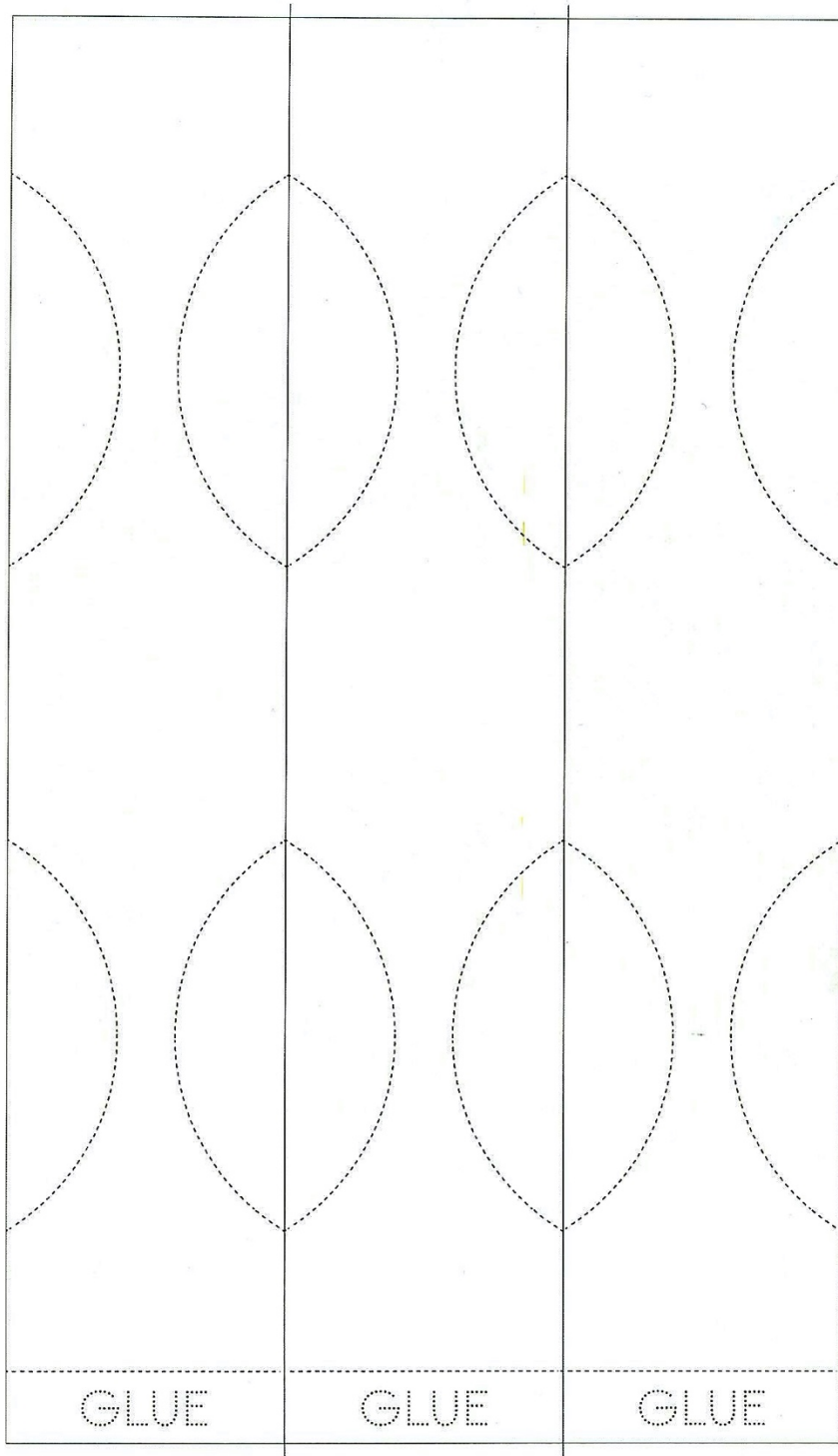


Figure 2

Upcycled Bubble Wands

Create bubble wands using various materials found around the house and compete to see who can blow the biggest bubble!

PROGRAM CATEGORY: Craft and activity

PROGRAM DELIVERY (FOR STAFF USE ONLY): This program can be explained via any media platform, as the concept is fairly straightforward. Challenging participants to take pictures of the bubble wands they make or the bubbles they create can add a social media element. Consider offering a prize for the biggest bubble and have kids send pictures of themselves making bubbles with their homemade wands.

INSTRUCTIONS (FOR STAFF): Creating your own examples of homemade bubble wands is recommended, but several examples are provided here as well.

AGE GROUP: 4+

TIME REQUIRED: The bubble solution needs to sit for at least an hour before use. The bubble wands can take as much or as little time to create as desired.

SPACE CONSIDERATIONS: Making the bubble wands takes up very little space, but it is recommended that participants be outdoors in an open space when blowing bubbles.

MATERIALS REQUIRED:

- For bubble solution:
 - 6 cups warm distilled water (If you don't have distilled, tap water will work just fine.)
 - 1 tbsp glycerin
 - ½ cup cornstarch OR corn syrup
 - ¾ cup Dawn dish soap (Dawn seems to work best, but any dish soap will work. Baby shampoo can be used as well.)
- *If you do not have glycerin or corn starch/syrup on hand, just water and dish soap will work, but the bubbles may be more fragile.
- Yarn OR string
- Hot glue gun OR white glue
- 2 plastic drink bottles (anything under 1L will work best)
- 10-20 plastic straws
- At least 2 pipe cleaners
- 10-20 pony beads
- A sharp knife, such as an exacto knife (Make sure you have an adult use the knife!)

*These are the materials we used to make our bubble wands, but feel free to experiment with other materials and seeing what you can come up with!

INSTRUCTIONS:

1. Make the bubble solution. It will work best if it sits for at least an hour prior to using, so it's a good idea to prepare it beforehand, so it will be ready by the time you're done making your bubble blowing devices! To make the bubble solution, first add the cornstarch or corn syrup to the distilled water in a large bowl and stir until thoroughly dissolved (when the mixture sits, the cornstarch may settle a bit, so be sure to give the solution a good stir before use). Next, add the glycerin and dish soap and until well mixed. Finally, let the mixture sit for at least an hour for best results. The bubbles and froth on the top will dissolve a bit, so don't worry if it doesn't look really soapy!

2. Make your bubble wands!

- a. To make a bubble wand from pipe cleaners, all you need is a few pipe cleaners and some pony beads. Create a loop out of one of the pipe cleaners and twist the ends together. Take another pipe cleaner and fold it in half. At the mid point of the pipe cleaner, twist the ends of the loop together with the new pipe cleaner and then continue twisting it around itself to form the handle. String the pony beads along the handle to create a more rigid structure.
- b. To make a wand capable of blowing dozens of bubbles at once, all you need is a hot glue gun OR white glue, a plastic bottle, a sharp knife or scissors, and a handful of plastic straws. First, have an adult cut the top portion of the bottle off, so that you have the bottleneck and drinking spout. Next, cut the straws carefully into segments roughly 1 inch long. Then, using the glue gun or white glue (make sure you have help using the glue gun as it gets very hot), begin gluing the straws along the inside of the cut edge of the bottle, leaving about half an inch of each straw sticking out. Continue gluing the straws in concentric circles until the entire open side of the bottle is filled with straws. Dip the large end of the bottle into the bubble solution and blow through the drinking spout to create a ton of bubbles all at once!
- c. For the simplest Do-It-Yourself wand for huge bubbles, all you need is a plastic bottle and a sharp knife. Have an adult cut off the top third of the bottle so you have the neck and the spout. Discard the bottom part. To blow bubbles, simply dip the large end of the bottle into bubble solution then blow through the spout!
- d. To make absolutely gigantic bubbles, try making this bubble blowing contraption! You will need yarn or string cut to about 3 feet long and two plastic straws. Start by threading the yarn through the straws and then tie the two ends of the piece of yarn together so it forms a large loop. That's all there is to it! To use: Hold the contraption by the straws, one straw in each hand. Then, dip the whole thing into the bubble solution. Hold it up with the straws far enough apart that it looks like a big circle and then start running and watch a giant bubble trail behind you!

3) Try and see how many bubbles you can make at once or who can blow the biggest bubble! If you're blowing bubbles with friends, make sure you're using the bubble solution one at a time and practicing social distancing.

SUGGESTED BOOKS AND MEDIA:

- *"Crash, Splash, or Moo!"* by Bob Shea
- Any movie with wands -- *Harry Potter* is always a good choice!

CONTRIBUTING LIBRARY: Valleyview Municipal Library



Materials



Step 2. a.



Step 2. a.



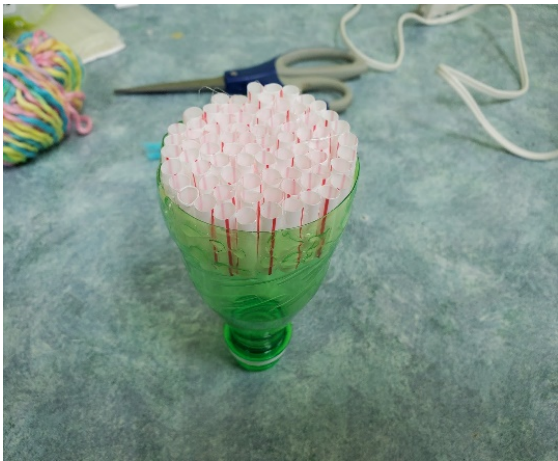
Step 2. b.



Step 2. b.



Step 2. b.



Step 2. b.



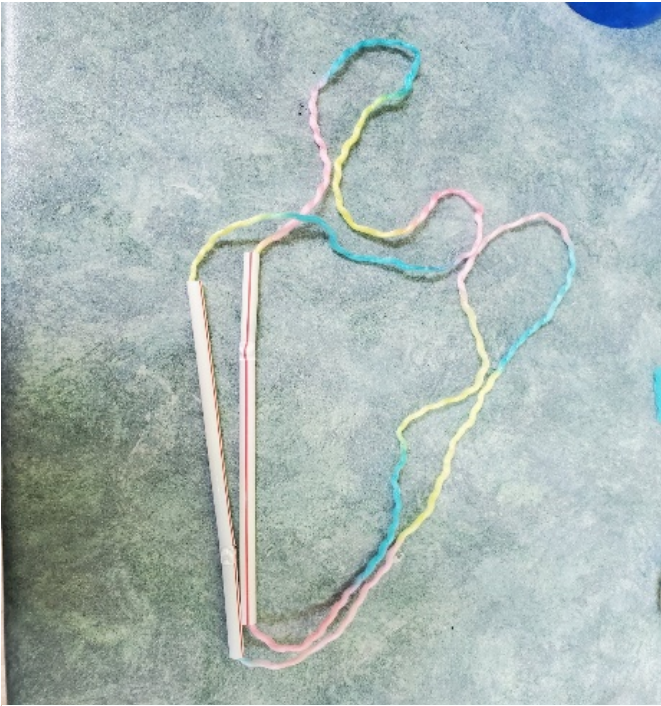
Step 2. c.



Step 2. c.



Step 2. d.



Step 2. d.



Weekly Outside Challenge

Each week, on Monday, a new outside challenge video will be released for children (of all ages) to watch. The goal of this activity is to get children outside to enjoy some of the nice summer sunshine.

PROGRAM CATEGORY: This activity will usually involve some kind of physical activity and be outside. Children (or parents) will first watch a video and then head outside to complete the challenge (sometime through the week).

PROGRAM DELIVERY (FOR STAFF USE ONLY): For this program, prerecorded videos would likely be the easiest way to go so that children and parents can refer back to the video if needed. Using the library's Facebook page and/or the YouTube challenge, or even a website would be the best place to release these videos each week to make them as accessible to the public as possible.

INSTRUCTIONS (FOR STAFF):

1. Choose the activity you would like to do. We will do chalk obstacle courses, scavenger hunts, nature walks, etc..
2. Create a video to introduce the activity and demonstrate if you think it is needed. For example, if you did a chalk obstacle course, you may want to draw one ahead of time and show it as an example.
3. Encourage children to send pictures of their creations to a library email, so that a special shoutout can be given to them the following week – what child doesn't love a shout out!

AGE GROUP: These activities will be family orientated, but the younger the child is, the more assistance they will need. To complete most of the tasks alone, the child should be at least 7 years old.

TIME REQUIRED: Videos with instructions of the task shouldn't be longer than 10-15 minutes, and the activity itself can take the child as long as needed.

SPACE CONSIDERATIONS: These activities are designed to be outside – some will need a sidewalk, a yard, or maybe even a walk around the neighborhood.

MATERIALS REQUIRED: Materials will depend on final activities chosen, but common materials needed would include:

- Chalk
- Paper (for scavenger hunt lists)
- Bags (to collect scavenger hunt items in)

INSTRUCTIONS (FOR PATRONS):

1. View video from Facebook/YouTube/Website.
2. Gather supplies needed after watching the video.
3. Go outside and complete the challenge.

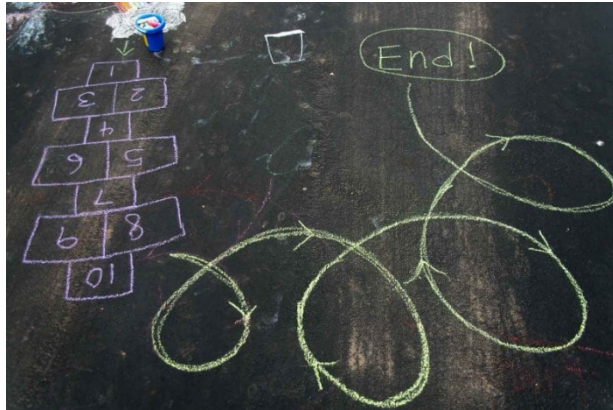
4. Send a picture of your work to the library email.

SUGGESTED BOOKS AND MEDIA:

- “Andrew the Seeker” by Lee Nordling
- “The Canadian Kids’ Guide to Outdoor Fun” by Helaine Becker and Claudia Dávila

CONTRIBUTING LIBRARY: Brooks Public Library

EXAMPLE PICTURES:



OUTDOOR ADVENTURE HUNT

- { } Something colorful.
- { } A pinecone.
- { } An acorn.
- { } Something smooth.
- { } Something rough.
- { } Two kinds of leaves.
- { } Two kinds of sticks.
- { } Something bumpy.
- { } A flat rock.
- { } Something fuzzy.
- { } Something pretty.
- { } A chewed leaf.
- { } A flower or petal.
- { } A piece of litter.
- { } Something you think is a treasure.



Weekly/Daily STEAM Challenges

Each day of the week (Monday through Friday) will have a new STEAM challenge. Each Monday a new science activity/challenge, Tuesday a new technology activity/challenge, Wednesday a new engineering activity/challenge, Thursday a new art activity/challenge, and Friday a new math activity/challenge. Science activities are most likely to include science experiments. Technology activities may involve coding or be an online Breakout. Engineering Challenges will have students building something new each week. Art activities will likely be crafts but could include drawing, colouring, etc. Math activities will likely be the introduction of a new card or dice game each week – GAME ON right?

PROGRAM CATEGORY: This program, because of its multiple components would be classified under many categories including science experiments, online exploration, concentration, arts and crafts, and games.

PROGRAM DELIVERY (FOR STAFF USE ONLY): For some activities, a prerecorded video may be best, but for these activities I would likely use Facebook Live to livestream the video to introduce the activity or challenge. Videos should be released or live at the same time each day (perhaps, 10:00 am or 2:00 pm).

INSTRUCTIONS (FOR STAFF): We are aiming to do all parts of STEAM each week, but this would be adaptable to include just art and engineering, or any single or combination of the STEAM days.

1. Choose which days of STEAM you would like to run (STEAM is STEM but with Art added).
2. Choose the activities you want to include as a part of each STEAM series.
3. Create a video or livestream the video each day to introduce and demonstrate the challenge.
4. Encourage children to send proof to a library email that they completed the task and give them a shoutout in the next week's video.

AGE GROUP: With this program being a combination of daily activities, each day will likely suit different age groups. The science activities will be best fit for ages 5-10 (although younger ones may need supervision). Technology activities would be best fit for ages 8-13. Engineering activities can be modified to meet a wide range of ages, so best fit age group would be 4-12. Art activities, dependent on the activity chosen, would be best fit for ages 4-10. Finally, the math games are going to be best understood by the older ages (8-12 or higher).

TIME REQUIRED: Introduction videos will vary in length depending on the activity but will probably average between 15-30 minutes. When the activities are being completed, the time required will vary for each child as some like to take their time, and some don't. These activities are just fun things for children to do, and not mandatory by any means.

SPACE CONSIDERATIONS: Most activities will be best completed indoors at a table or on a floor with lots of space. Some activities (science and art mostly) may be best completed outside.

MATERIALS REQUIRED: Some general materials that will be required include:

- Science
 - Vinegar, baking soda, skittles, water, etc.
- Technology
 - Computer, paper, pencils, etc.
- Engineering
 - Office supplies, clothes pins, LEGO, etc.
- Art
 - Paper, pencils, colouring utensils, chalk, scissors, glue sticks, etc.
- Math
 - Cards, dice, paper, pencils, etc.

INSTRUCTIONS (FOR PATRONS):

1. View the daily video
2. Gather supplies needed to complete the activity or challenge
3. Do activity or challenge and HAVE FUN!

SUGGESTED BOOKS AND MEDIA:

Books will tie into some activities throughout this program. For example, one book tie-in for art may be ‘The Most Magnificent Thing’ by Ashley Spires where children are encouraged to create their own magnificent thing with supplies from around their homes.

CONTRIBUTING LIBRARY: Brooks Public Library

EXAMPLE PICTURES:

SCIENCE:



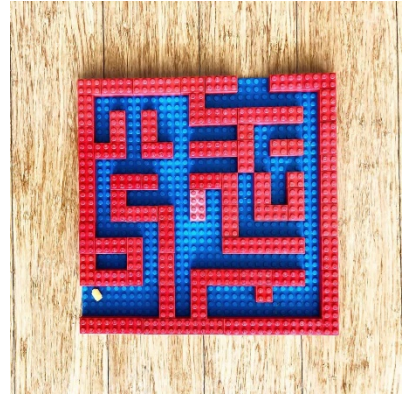
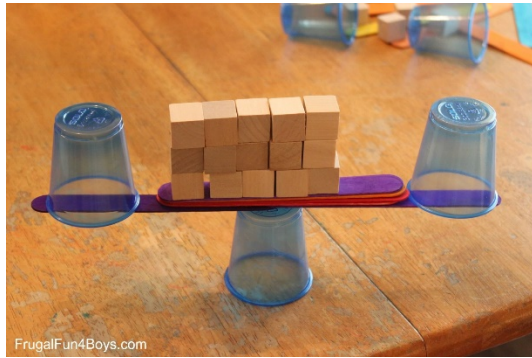
TECHNOLOGY:



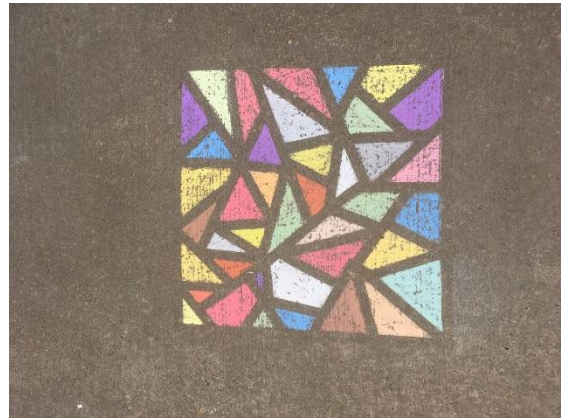
Digital Games

Create classes and assign academic-aligned digital games

ENGINEERING:



ART:



MATH:



Tween & Teen Summer BINGO (July & August)

Complete the various activities on your card to get a BINGO! Submit your BINGO card online to be entered in to win a book prize!

PROGRAM CATEGORY: Game; to be completed in patrons' own home and submitted online.

PROGRAM DELIVERY (FOR STAFF USE ONLY): Use whichever editing software you are most comfortable with to create your BINGO cards (Publisher, Canva, Library Aware, Photoshop, etc.). We used the free version of Canva to create ours. Create a variety of activities to be completed to appeal to a large audience with few barriers such as exercise, crafts, reading, etc. Feel free to make activity squares that promote library resources specific to your library (follow us Instagram for example).

INSTRUCTIONS (FOR STAFF): Post and promote on your library social media/website. Create some sort of online submission form for patrons' to send in their completed BINGO cards. We will be using Google Forms. We have decided not to require "proof" (eg. photos) of completed activities, but will ask patrons to list which squares they completed to make a BINGO in their submission form. If you are worried about cheating, you may want to reevaluate how you collect your BINGO cards. We are limiting one BINGO submission per person per month to prevent cheating.

AGE GROUP: Ours is geared towards tweens/teens 10-18, but you can modify the activities on your BINGO card for any age group.

TIME REQUIRED: A couple hours to create the BINGO cards, and a few minutes each week to review submissions. We created two different BINGO cards for the months of July and August that will run from the first of the month and end on the last day of the month.

MATERIALS REQUIRED: Editing software, prizes

INSTRUCTIONS (FOR PATRONS): Complete the various activities on your card to get a BINGO! Submit your BINGO card online to be entered in to win a book prize! One BINGO submission per person per month.

Google Form example:

First & Last Name:

Library Card #:

Phone #:

Email:

Age:

Which squares did you complete to create a BINGO?:

CONTRIBUTING LIBRARY: Medicine Hat Public Library



		<i>Free</i> GOT A LIBRARY CARD		



AUGUST
Bingo

		<i>Free</i> GOT A LIBRARY CARD		



AUGUST *Binga* FOR TWEENS & TEENS

SPUN THE MHPL WHEEL OF READING	PAINTED SOMETHING	CAUGHT UP WITH FRIENDS	SUBSCRIBED TO OUR YOUTUBE CHANNEL @MHPUBLICLIBRARY	MADE A BACK-TO-SCHOOL MOOD BOARD
PICKED UP TRASH IN MY COMMUNITY	FOLLOWED US ON TIKTOK @MHPLTEENS	COOKED A HEALTHY MEAL	WATCHED A MOVIE	CHECKED OUT A LIBRARY E-BOOK OR E-AUDIOBOOK
FOLLOWED AN MHPL CRAFT TUTORIAL ON YOUTUBE @MHPUBLICLIBRARY	LEARNED A NEW SKILL/HOBBY	<i>Free</i> GOT A LIBRARY CARD	FINISHED A BOOK	PLAYED VIDEO GAMES
MADE A MUSIC PLAYLIST	STARTED A NEW BOOK	TRIED SOME "MINUTE-TO-WIN-IT" CHALLENGES	DECLUTTERED MY SPACE	FOLLOWED US ON INSTAGRAM @MHPLTEENS
RECOMMENDED A BOOK TO A FRIEND	SPENT TIME IN NATURE	HAD A PHOTOSHOOT (INDOORS OR OUTDOORS)	STARTED A JOURNAL	COMPLETED A VIRTUAL ESCAPE ROOM



JULY

Binga

FOR TWEENS & TEENS

MADE SOMETHING USING ONLY DUCT TAPE	FINISHED A BOOK	FOLLOWED US ON INSTAGRAM @MHPLTEENS	HAD A FAMILY GAME NIGHT	WORE RED FOR CANADA DAY
WENT FOR A WALK OUTSIDE	PLAYED VIDEO GAMES	CREATED A BAD ART MASTERPIECE	CREATED A BOOK FLAT LAY AND TOOK A PHOTO OF IT	BORROWED A LIBRARY E-BOOK OR E-ADUOBOOK
COMPLETED A VIRTUAL ESCAPE ROOM	FOLLOWED US ON TIKTOK @MHPLTEENS	<i>Free</i> GOT A LIBRARY CARD	TOOK A SOCIAL MEDIA BREAK	BAKED/COOKED SOMETHING DELICIOUS
LEARNED A NEW SKILL/HOBBY	GOT 8 HOURS OF SLEEP	WATCHED YOUR FAVOURITE TV SHOW	STARTED A NEW BOOK	FOLLOWED AN MHPL CRAFT TUTORIAL ON YOUTUBE @MHPUBLICLIBRARY
SUBSCRIBED TO OUR YOUTUBE CHANNEL @MHPUBLICLIBRARY	MADE A CLOSET COSPLAY (COSTUME)	RECOMMENDED A BOOK TO A FRIEND	VISITED A LOCAL PARK	SPUN THE MHPL WHEEL OF READING

DIY PAINT BRUSHES (ART) for STEAM SATURDAY!

Science - Technology - Engineering - Arts - Mathematics

Art is an amazing emotional outlet.

PROGRAM CATEGORY: Craft

PROGRAM DELIVERY: DIY paint brushes add in textures and children get a level of sensory exploration. This is a fabulous way to encourage children to use their imagination. Not only are they creating a piece of art, they are also creating the utensils they need to do the activity. This allows children to experiment with trial and error, develop new ideas, and find solutions to problems. Painting with clothes pins encourages an array of fine motor development along with hand-eye coordination. Children will grasp, squeeze, stir, and more while they create their masterpieces. As children manipulate materials, they begin to understand how and why things happen.

AGE GROUP: 6+

TIME REQUIRED: 10+ minutes (depending on how many brushes are made)

SPACE CONSIDERATIONS: Large enough space to do the craft. Somewhere you don't mind a mess.

INSTRUCTIONS FOR STAFF:

1. Have the brush materials already cut for ease of use.
2. Questions to ask to encourage active learning:
 - What will each brush look like?
 - How will each brush be different?
 - Which brush will be the best?
 - Is there one that won't work very well?

MATERIALS REQUIRED:

- Clothespins
- Various materials that can be used as brushes
 - Plastic craft string
 - Pipe cleaners
 - Tin foil
 - Feathers
 - Cling wrap
 - Pompoms
 - Sponge
- Paper
- Paint
- Scissors (unnecessary if materials are pre-cut)

INSTRUCTIONS:

1. Cover your space well to ensure paint and craft materials don't make a huge mess.
2. Let the participants colour, paint, or decorate their clothespins any way they would like.

3. Have the participants clip their bits of materials into their clothespins, creating different brushes with different textures each time. (Use glue, tape, or elastics to keep the materials firmly in the clothespin and not in the paint!)
4. Create a picture using all of your brushes!

CONTRIBUTING LIBRARY: Medicine Hat Public Library

EGG CARTON GEODE (ROCK SCIENCE) for STEAM SATURDAY!

Science - Technology - Engineering - Arts - Mathematics

Geodes are hollow rocks that are lined with crystals.

PROGRAM CATEGORY: Science experiment, craft

PROGRAM DELIVERY: Geodes form in a variety of ways. In volcanic rock they start out as bubbles, and in sedimentary rocks they start out as animal burrows, mud deposits, and tree roots. Over time the bubbles, mud or tree roots create a hollow cavity with the rock. The outer edge becomes hard, and in the hollow inside, that is where the science takes place. Ground water that runs through these hollow rocks is what causes the crystals to form. Why? Ground water carries many different minerals and those minerals get deposited inside the hollow rock. These minerals develop geodes over many years. Some of these minerals include quartz, amethyst, and calcite. The different minerals are responsible for the different colors the geodes turn out to be. If there is Iron in it, it may have a red /rusty color, it may have clear quartz, or purple amethyst. Like a fingerprint all geodes are unique based on the minerals inside it. Fun Fact: The largest geode is over three meters tall- that is taller than a moose!- and it weighs two and a half tons! - that is heavier than a rhinoceros!

AGE GROUP: 10+

TIME REQUIRED: 25 minutes

SPACE CONSIDERATIONS: Large enough space to do the craft/experiment. Somewhere you don't mind a mess.

NO INSTRUCTIONS FOR STAFF INCLUDED.

MATERIALS REQUIRED:

- An egg carton
- Epsom salts
- Food coloring
- White glue
- A baggie or small dish
- Scissors, Tape, Paint brush
- Mod Podge, or ther clear sealant (optional)

INSTRUCTIONS:

1. First cut out 2 sections from your egg carton- make sure you cut them so they will fit together flush.
2. Then you will put about ¼ cup epsom salt into a container or baggie and add a couple drops of food coloring. Mix or shake till it is combined.
3. Generously line the inside of your egg carton with glue.
4. Add a scoop of colored epsom salt to each half and then tape together, and shake.
5. Open your geode, and be amazed!
6. Optional- Once your glue is dried, you can add a layer of mod podge or other clear sealant to add an extra shine.

CONTRIBUTING LIBRARY: Medicine Hat Public Library

PUFFY SLIME (CHEMISTRY) for STEAM SATURDAY!

Science - Technology - Engineering - Arts - Mathematics

Slime it up this STEAM Saturday!

PROGRAM CATEGORY: Science experiment, craft

PROGRAM DELIVERY: Slime is created when you mix PVA with borate ions. Slime is about polymers- a polymer is a molecule made from joining together many small molecules. The glue is our main polymer. It is made up of long repeating and identical strands of molecules. Glue is a liquid state and these molecules flow past one another keeping it in a liquid state. Chemical bonds are formed when you mix PVA and borate ions together. Borate ions are found in saline solution. This changes the position of the molecules in the glue in a process called cross linking. A chemical reaction occurs between the glue and the saline solution and a new substance is formed- slime!

AGE GROUP: 10+

TIME REQUIRED: About 30 minutes

SPACE CONSIDERATIONS: Large enough space to do the craft/experiment. Somewhere you don't mind a mess.

INSTRUCTIONS FOR STAFF: Ask the following types of questions to encourage active learning throughout the activity!

Think about states of matter - is slime a liquid or a solid?

- Both! It is called a non-newtonian fluid because it is a bit of both.

What makes puffy slimy puffy?

- The shaving cream. It is injected with air, and those air molecules take up space creating puffy slime.

MATERIALS REQUIRED:

- 1 cup PVA glue
- 3 heaping cups of shaving cream -the more you use the puffier the slime will be.
- 2 tbsp saline solution
- 1 tsp baking soda
- 1 tsp glitter
- 1 tsp food coloring
- Large bowl
- Spactuala

INSTRUCTIONS:

1. Add glue, glitter, and food coloring to a large bowl - Mix to make a homogenous mixture
2. Add baking soda, saline, and shaving cream- Stir
3. Wait 3 minutes
4. Pick up slime and knead until smooth, stretchy, and no longer sticky

CONTRIBUTING LIBRARY: Medicine Hat Public Library

BALLOON CAR (ENGINEERING/PHYSICS/ART) for STEAM SATURDAY!

Science - Technology - Engineering - Arts - Mathematics

It might not seem like it at first, but a simple balloon car is loaded with physics and engineering concepts! You get to play engineer and get artsy when designing your own car, and physics comes into play when the car is in motion.

PROGRAM CATEGORY: Science experiment, craft

PROGRAM DELIVERY: Potential energy is stored when you blow up the balloon. When you release the balloon, this energy is converted to kinetic energy—the energy of motion. Which makes your car move. Another way to think about the balloon's movement is to use **Newton's third law of motion: For every action there is an equal and opposite reaction.** When you inflate a balloon and then release it, the rubber contracts and pushes the air out the end of the balloon. This means that there must be an equal and opposite reaction—the air pushes back on the rubber, propelling the balloon forward. Fun Fact: This principle is used in real rockets and jets that shoot a high-speed stream of gas out the back of their engines, propelling the vehicle forward.

AGE GROUP: 10+

TIME REQUIRED: About 30 minutes

SPACE CONSIDERATIONS: Large enough space to do the craft/experiment. Somewhere you don't mind a mess.

INSTRUCTIONS FOR STAFF: If your car does not work perfectly on the first try these could be the reasons why:

- Its axles are not parallel (straight) or the wheels wobble.
 - Too much friction can cause the wheels to get stuck, and the balloon will not be powerful enough to push the car forward. Make sure to test your car by giving it a push and making sure the axel moves freely. If not, you may have to make some adjustments to your design.
- If you are losing air too fast.
 - Make sure no air escapes the balloon where it is taped to the straw, and re-tape it more tightly if necessary.

MATERIALS REQUIRED:

- Cardboard
- Straws
- Balloon
- Tape
- Glue
- Wood skewers
- Bottle caps

INSTRUCTIONS:

1. Cut a square from the cardboard.
2. Tape the straws on the bottom.
3. Put the wooden skewers through the straws.
4. Attach the bottle caps onto the end of the skewers for wheels (poke holes through them).
5. Place the straw in the balloon- tape the end tight- make sure you can blow it up!
6. Attach this all to the top of the cardboard.
7. Blow up the balloon, let the car go!
8. Challenge: who's car rolls the farthest?

CONTRIBUTING LIBRARY: Medicine Hat Public Library

CHOCOLATE CHIP COOKIES (CHEMISTRY) for STEAM SATURDAY!

Science - Technology - Engineering - Arts - Mathematics

Chemistry is the science that deals with the identification of the substances of which matter is composed; the investigation of their properties and the ways in which they interact, combine, and change; and the use of these processes to form new substances. That is also what baking is! Combining ingredients, seeing how they interact and change, and forming a new substance.

PROGRAM CATEGORY: Science experiment, baking

PROGRAM DELIVERY: Each ingredient has a specific purpose:

- Butter is essential to the flavor and the texture. Butter is made of fat and water. When the butter is melted the water molecules evaporate or get absorbed by other ingredients.
 - Also, spreading is a big factor with butter. If you've ever pulled out a tray of cookies that all migrated into one big blob, warm butter was probably the issue. If the dough is too warm before it goes into the oven, the cookies spread before the eggs and baking soda are able to set the cookie.
 - Beating the butter creates air pockets, which create fluffy cookies.
- Brown sugar adds toffee flavor and chewy texture.
- White sugar makes cookies sweet. Sugar binds with the water molecules from the butter, and keeps the cookies moist.
- Eggs are a protein that adds structure and moisture. When heated the eggs go from a liquid state to a solid state, and helps hold the cookie together
- Vanilla adds warmth and balanced complexity to the flavor.
- Baking soda is the traditional chemical leavener in cookies, but sometimes
- Baking powder is added for more lift.help the dough rise and set the cookies' shape.
- Flour contributes protein and structure to cookies, it absorbs water and glues the fat (from butter) and sugar together
- Salt enhances sweetness and reduces bitterness
- Chocolate size, shape, and cacao percentage determine how chocolaty your final cookie will be.

AGE GROUP: 10+

TIME REQUIRED: About 30 minutes

SPACE CONSIDERATIONS: Large enough space to do the craft/experiment. Somewhere you don't mind a mess.

NO INSTRUCTIONS FOR STAFF INCLUDED.

MATERIALS (INGREDIENTS) REQUIRED:

- 1 cup margarine
- $\frac{3}{4}$ cups brown sugar
- $\frac{3}{4}$ cups white sugar
- 1 tsp vanilla
- $\frac{1}{2}$ tsp water

- 2 eggs
- 2 ¼ cups flour
- 1 tsp baking soda
- 1 tsp salt
- 1 cup chocolate chips

INSTRUCTIONS:

1. Find your favourite online recipe. Follow the instructions carefully, adding and mixing each of the listed ingredients.
2. Notice how the substance changes with each new add-in!
3. When the recipe instructions have been followed, bake at 350 for 10-12 minutes (with adult supervision!)
4. (Optional Challenge): Experiment with chilling the dough. Chill one cookie sheet, and do not chill the next cookies sheet. Compare the cookies.

CONTRIBUTING LIBRARY: Medicine Hat Public Library