



KEEP YOUR KIDS MOVING

Guelph Family *Health Study*

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Or click [here](#)!



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WHAT'S THIS BOOK ALL ABOUT?

The Guelph Family Health Study is following families during the developmental years of their children's lives in order to learn about the nutrition, sleep, physical activity and other behaviours that impact health. Throughout the study, we are hoping to provide families with the help they need to continue building healthy habits for themselves and their children. This short book will be focused on the health behaviours of physical activity, sleep and sedentary behaviour/screen time. While the Canadian 24-Hour Movement Guidelines for children will be covered, it will also include resources to help families continue reaching their sleep and movement goals. These resources are based on what we have learned so far in the study and on other research in the field of health behaviours. Building healthy habits at an early age will be beneficial for your children's health today and into the future, as research shows that these habits carry into adolescents and adulthood.¹



Learn more about the GFHS!



Or click here!

Go through this book with the kids! They can track the progress with this checkbox that is on every page!



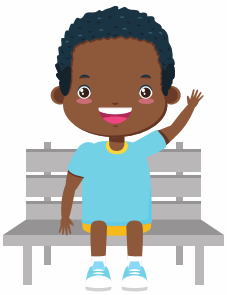
Canadian 24-Hour Movement Guidelines: *Infants (less than 1)*



MOVE: Different types of movement throughout the day; more is better!
At least 30 minutes of tummy time for babies that are not yet mobile!



SLEEP: 14-17 hours (0-3 mos), 12-16 hours (4-11 mos), naps included.



SIT: Restrained (e.g. stroller) for no more than an hour at a time.

SCREENS: No screen time!

Check out the guidelines here!



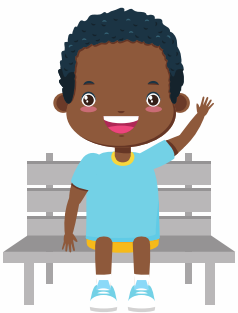
Canadian 24-Hour Movement Guidelines: *Toddlers (1-2 yrs)*



MOVE: At least 180 minutes of physical activity at a variety of intensities (see pages 10-12). Aim for a variety of different activities!



SLEEP: 11-14hours, naps included



SIT: Restrained (e.g. highchair) for no more than an hour at a time.

SCREENS: No screens before 2 years!
Less than 1 hour/day of screen time for 2 years olds.

Check out the guidelines here!



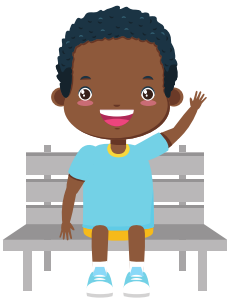
Canadian 24-Hour Movement Guidelines: *Preschoolers (3-4 yrs)*



MOVE: At least 180 minutes of physical activity at a variety of intensities (see pages 10-12) and 60 of these minutes should be energetic play. Aim for a variety of different activities!



SLEEP: 10-13 hours, naps included



SIT: Restrained (e.g. highchair) for no more than an hour at a time.

SCREENS: Less than an hour of sedentary screen time

Check out the guidelines here!



Canadian 24-Hour Movement Guidelines: **Children (5-13 yrs)**

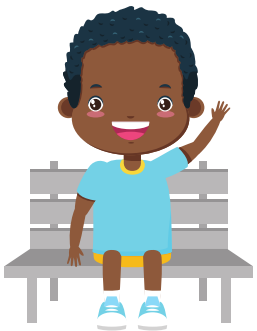


SWEAT: At least 60 minutes of moderate to vigorous physical activity per day (see pages 10-12), with vigorous and muscle/bone strengthening activities 3 times per week

STEP: Several hours of light physical activity



SLEEP: 9-11 hours



SIT: Avoid sitting for long periods of time

SCREENS: Maximum 2 hours of sedentary screen time

(*School and homework do not count as screen or sedentary time*)

Check out the guidelines here!





Why are the Movement Guidelines Important?



Our modern lifestyle is associated with more sitting and screen time and less physical activity and quality sleep that in the past and this is² related to poorer health. This has been proven by research, as only 12% of preschool-aged children were meeting all of the Canadian 24-Hour Movement Guidelines.³



There are many benefits to positive health behaviours such as:

- reduced weight
- improved brain and bone development
- improved mental health
- better heart health
- improved motor skills^{2,4}



Use the tracker on page 21 to track your daily progress!

Physical Activity Intensities:

Vigorous Activities

Almost all out! In vigorous physical activity, your heart should be pounding, your breathing should be fast, and you should only be able to say a few words between breaths. This type of physical activity should make you sweat and should be between 7-9 on a scale from 1-10 on a scale of how hard you think you are working. **The best way to measure this in children is by seeing how many words they can say between breaths! If they cannot say a full sentence between breaths, they are doing vigorous physical activity.**

- Tag/running games
- Fast bicycle riding
- Jumping rope
- Karate
- Running
- Ice or field hockey
- Basketball
- Swimming
- Soccer
- Gymnastics
- Prolonged dancing at higher intensity



Physical Activity Intensities:

Moderate Activities

Moderate physical activity increases breathing and heart rate but only slightly and not to the same extent that vigorous physical activity does. These activities should be between 5-6 on the scale from 1-10 of how hard you think you are working. These activities may make you sweat as well but not much.

The best way to measure this in children is to ensure that they can talk but not sing their favourite song normally.



- Brisk walking
- Slower biking
- Hiking
- Household chores and yard work like vacuuming or raking
- Catching sports like baseball or football
- Playing at the park
- Active videogames
- Dancing
- Yoga flow classes

Physical Activity Intensities:

Light Activities

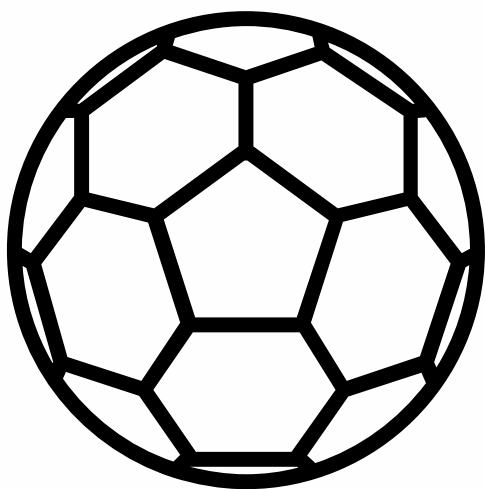
These activities involve movement but do not increase the heart or breathing rate much at all. They do not cause sweating and can be thought of as everyday activities within a day that involve movement. **The best way to measure this in children is to see if they can sing their favourite song normally.**

- Normal pace walking
- Stretching and yoga
- Golf
- Table Tennis
- Static catch games
- Cooking
- Playing a musical instrument
- Hygiene practices like showering
- Grocery shopping



Physical Activity Colouring Sheet

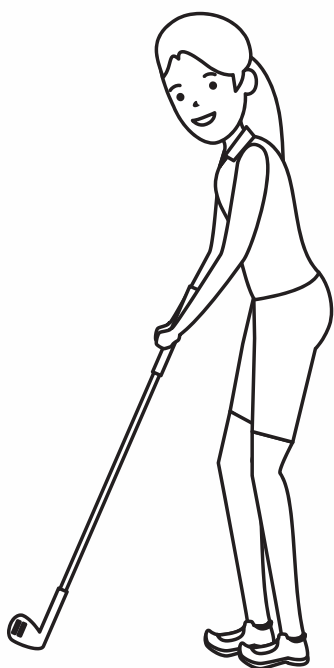
Circle the intensity for each of these activities!



 **Vigorous**

 **Moderate**

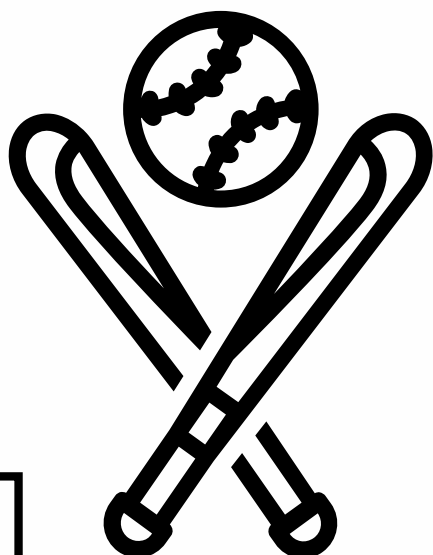
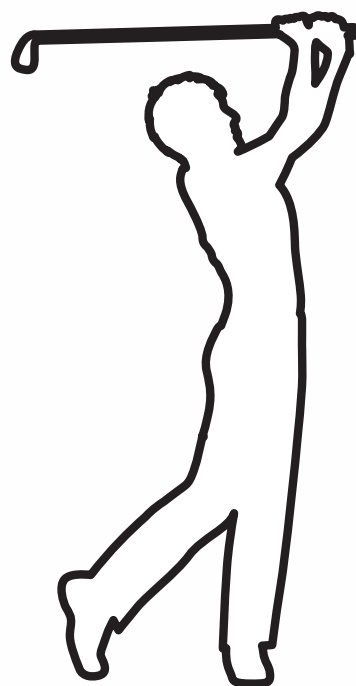
 **Light**



 **Vigorous**

 **Moderate**

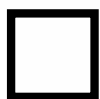
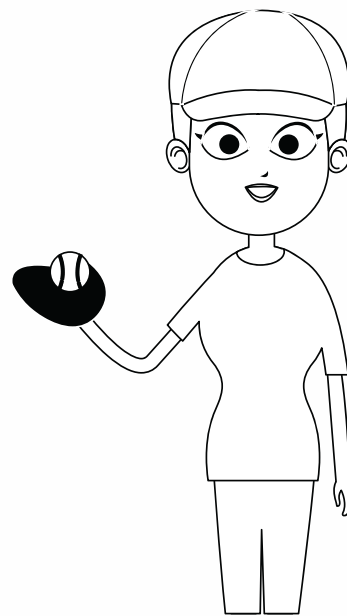
 **Light**



 **Vigorous**

 **Moderate**

 **Light**



Physical Activity Colouring Sheet

Circle the intensity for each of these activities!



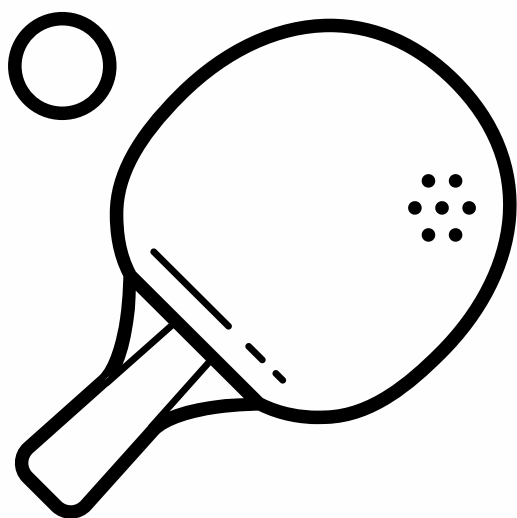
Vigorous



Moderate



Light



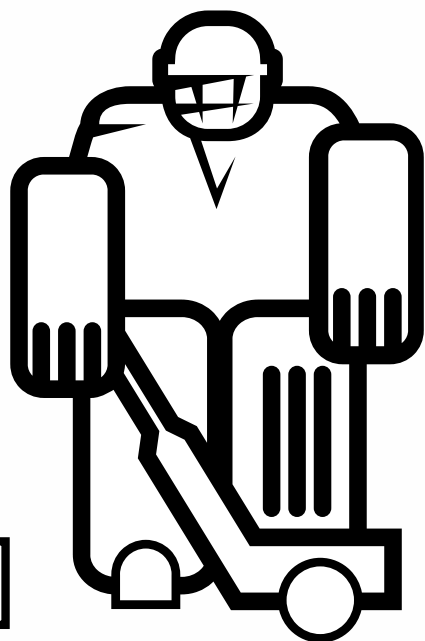
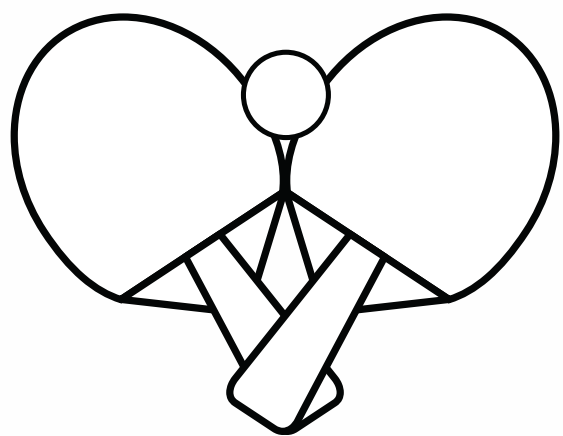
Vigorous



Moderate



Light



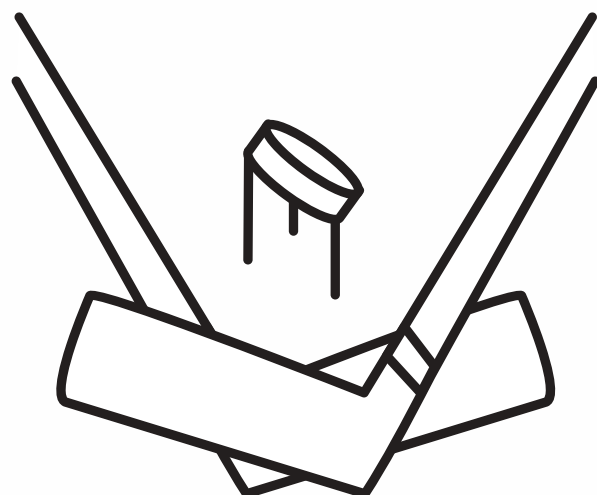
Vigorous



Moderate



Light





Sleep Habits



Quality sleep is very important for children as it contributes to normal growth, is associated with doing better in school and positively impacts health into adulthood.⁵

In a study examining preschool-aged children in Canada, 84% of children were meeting the recommended 10-13 hours of sleep that is outline in the 24-Hour Movement Guidelines.³

While families are doing a good job of meeting this guideline, it is still important to make sure that sleep hygiene is maintained in order to ensure that children get quality sleep. Sleep hygiene starts with a good and consistent bedtime routine. A checklist for a healthy bedtime routine can be found on page 19.



Sedentary Behaviour and Screen Time



Sedentary behaviour and screen time are both increasing as part of the modern lifestyle. Meeting the guideline for these health behaviours is important as increased sedentary screen time (e.g., television, tablet, phone, passive video games) is associated with many negative health outcomes such as increased weight gain, lower self-esteem and worse performance in school in school-aged children.⁶

Some sedentary behaviours such as homework and reading are associated with positive health outcomes.²



NOTE: the guidelines are strictly focused on sedentary behaviour outside of school and do not include time spent doing schoolwork as sedentary time.



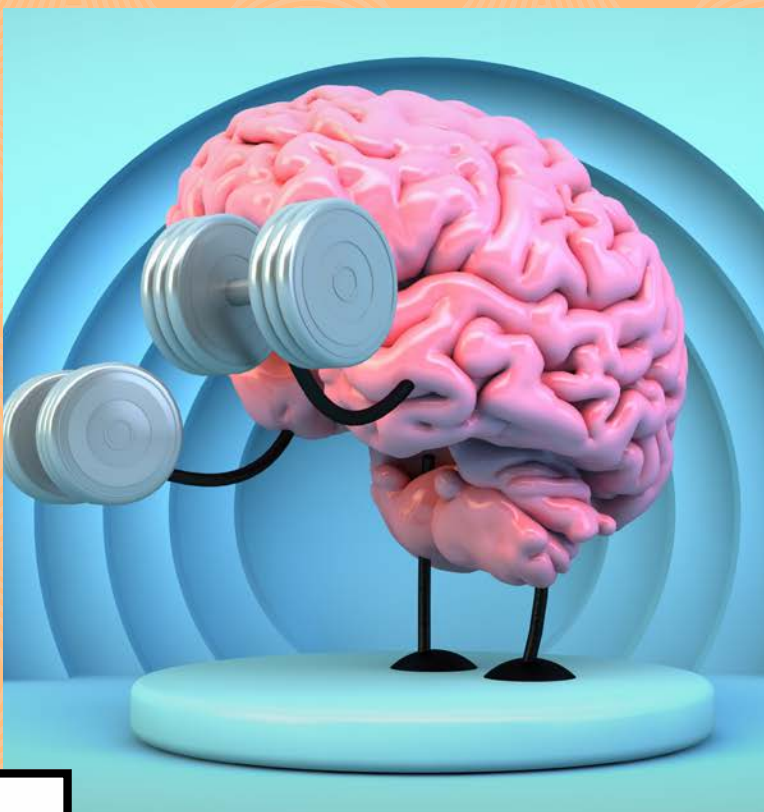
Lifestyle Behaviours and Mental Health



Recent research shows important links between mental health, sleep, sedentary behaviour and physical activity in children.⁷ Specifically, these studies have found that measures of children's mental health are improved by increased exercise, increased quality sleep and reduced sedentary behaviour.^{7,8}

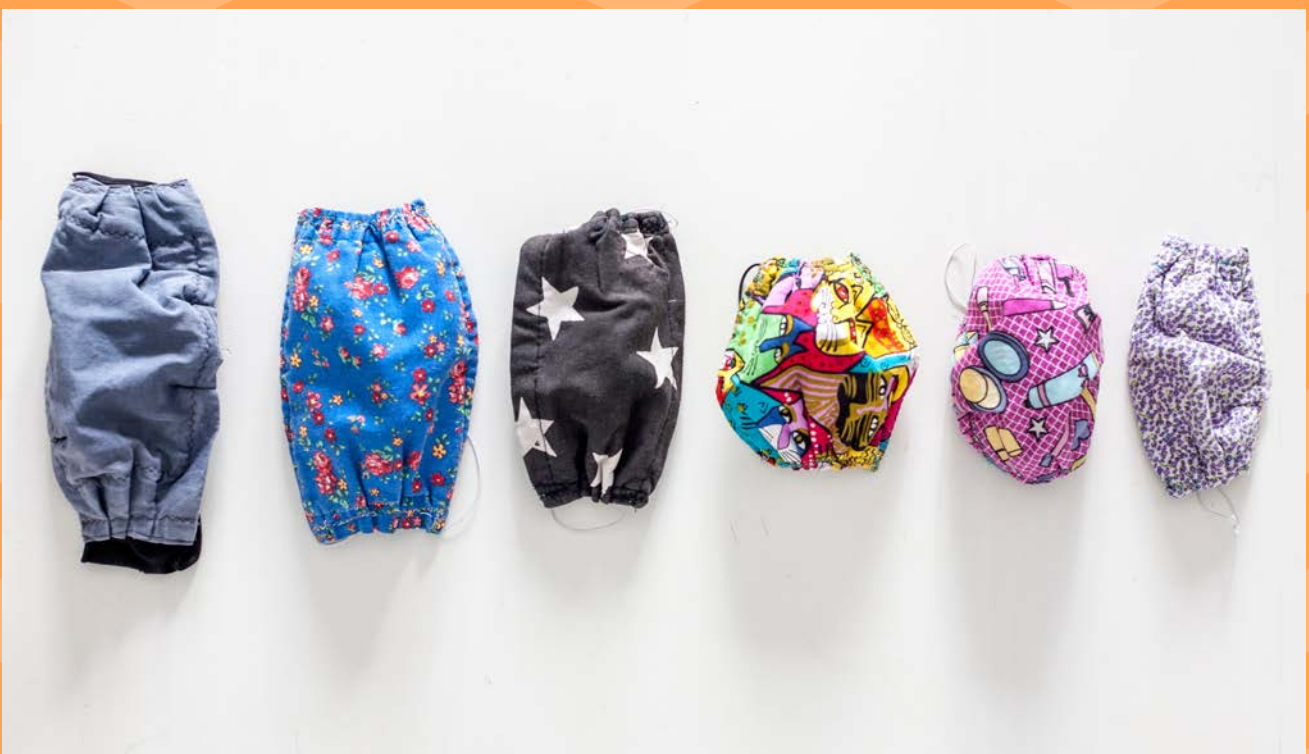


It is important to try to help your children understand that their behaviours can impact their mental health and begin to form good habits that carry on into adulthood. Talk to them about how they feel when they are exercising as compared to when they have had a more sedentary day.



The Effect of COVID-19 *on Families*

The COVID-19 pandemic has presented a significant barrier for families to continue moving and meeting the 24-Hour Movement Guidelines. Overall, children have been less active, spent less time outside and are doing more sedentary screen time than before the pandemic.⁹ In a survey of GFHS parents, screen time had increased in 87% of children and physical activity had decreased in 52% of children.¹⁰ While the public health measures in place right now are necessary to prevent the spread of COVID-19, they do present a barrier to continuing to live a healthy lifestyle for families. Use the resources beginning on the next page to keep your children moving during the pandemic!



The following pages
contain resources that
will help your family
continue to meet the
24-Hour Movement
Guidelines and have
fun while doing it!

Bedtime Routine Checklist

- ☐  Provide time to wind down (calming activities)
- ☐  Avoid eating big meals or snacks close to bedtime
- ☐  Keep a consistent bedtime
- ☐  Brush teeth/use the bathroom
- ☐  Make sure the room is cool and dark
- ☐  No screens in the bedroom
- ☐  Keep a consistent wake-up time



Silly Bedtime Routine Quiz

Take this quiz to become a sleep hygiene expert! Answers at the bottom of the page!



1) What should you eat before bed?

A) Big meal

B) Avoid eating before bed!



2) Should you go to bed at different times every night?

A) No-way!

B) Of course!



3) What should not be in the bedroom?

A) Screens

B) Pillows



4) The bedroom should be...

A) Cool & Dark

B) Warm & Bright

ANS: 1) B 2) A 3) A 4) A

24-Hour Movement Guideline Tracker (1-2 yrs)

Use this table to track your weekly progress in meeting the 24-Hour Movement Guidelines (found on pages 4, 5 and 6). When you hit the guideline for the day, put a sticker or a check mark in the box!

Guideline	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Move (180 mins)							
Sleep (11-14 hrs)							
Sit (<1 hr)							
Screen (none)							

24-Hour Movement Guideline Tracker (3-4 yrs)

Use this table to track your weekly progress in meeting the 24-Hour Movement Guidelines (found on pages 4, 5 and 6). When you hit the guideline for the day, put a sticker or a check mark in the box!

Guideline	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Move (180 mins)							
Sleep (10-13 hrs)							
Sit (<1 hr)							
Screen (<1 hr)							

24-Hour Movement Guideline Tracker (5-13 yrs)

Use this table to track your weekly progress in meeting the 24-Hour Movement Guidelines (found on page 7). When you hit the guideline for the day, put a sticker or a check mark in the box!

Guideline	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Sweat (60 mins)							
Step (Several hrs)							
Sleep (9-11 hrs)							
Sit/screen (max 2hrs)							

GFHS SCREEN-FREE INDOOR ACTIVITIES

SPIN THE WHEEL OR ROLL THE DICE TO DECIDE WHAT ACTIVITY YOU ARE GOING TO DO! QR CODES ATTACHED FOR SOME ACTIVITIES.



ACT OUT YOUR
FAVOURITE
BOOK (MAKE
OR INCLUDE
COSTUMES)!

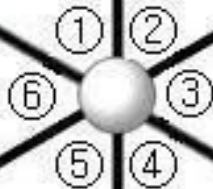
CREATE A DANCE
(WITHOUT
TIKTOK) TO YOUR
FAVOURITE SONG!

DO A
SCIENCE
EXPERIMENT
(IDEAS
ATTACHED)

LEARN TO
MAKE PAPER
AIRPLANES
AND WATCH
THEM FLY!

USE AN OLD
PILLOWCASE
AS A CANVAS
FOR PAINT
OR MARKERS!

COOK A
MEAL FROM
A GFHS
COOKBOOKS!



GFHS SCREEN-FREE INDOOR ACTIVITIES

SPIN THE WHEEL OR ROLL THE DICE TO DECIDE WHAT ACTIVITY YOU ARE GOING TO DO! QR CODES ATTACHED FOR SOME ACTIVITIES.



**MAKE
PUPPETS
AND CREATE
A PLAY!**

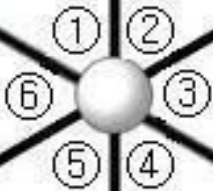
**PLAY DRESS-UP
AND CREATE A
STORY OR
PERFORMANCE!**

**GO
THROUGH
OLD FAMILY
PHOTO
ALBUMS!**

**USE A
BEDSHEET
TO PLAY
PARACHUTE
GAMES!**

**CREATE
YOUR OWN
CARDS FOR
USE IN THE
FUTURE!**

**MAKE
A
SCRAPBOOK!**



GFHS Screen-Free Indoor Activities

Use these QR codes for ideas to resources on the wheel if you do not know them or if you want some help!

GFHS Cookbooks



Outdoor Winter Science Experiments



Bedsheet Parachute



GFHS cookbooks: <https://guelphfamilyhealthstudy.com/cookbooks/>

Outdoor Winter Science Experiments: <https://teaching2and3yearolds.com/hands-on-preschool-winter-science-activities/>

Bedsheet Parachute: <https://entertainyourtoddler.com/bedsheet-parachute/>

Scrapbook Resource



Paper Airplane Guide



Finger Puppets Guide



Scrapbook Resource: <https://innerchildfun.com/2013/08/simple-summer-scrapbooks-kids-can-make.html/amp>

Paper Airplane Guide: <https://www.foldnfly.com/#/1-1-1-1-1-1-1-2>

Finger Puppet Guide: <https://craftsbyamanda.com/kids-puppets/>

BINGO FAMILY ACTIVITY. Try these fun screen-free activities with your family! Complete all the activities in the same row either vertically, horizontally, or diagonally to get BINGO. Once you have completed a line go for the WHOLE card! We have provided links and resources for many of these activities below.

B	I	N	G	O
Race to see who can get into their full winter gear quickest	Make a picnic and take it on a hike	Make a homemade slip and slide using a tarp	Decorate garden rocks, the bugs will appreciate a fresh new home!	Have an aluminum foil boat challenge
Make your own bookmarks	Play tag with water-guns	Create a game using sidewalk chalk (maze, hopscotch)	Go for a walk to get ice cream	Play jump rope games
Redecorate a room in the house	Buy mentos and coke and do a science experiment		Make your own homemade playdough	Play Disney Movie charades
Go for a family hike	Make a scrapbook		Wash the car (excuse for a friendly water fight)	Learn a song and create a dance for a family talent show
Play Drip Drip Drop	Do a puzzle together as a family	Make silly birthday cards to use in the future	Make homemade popsicles	Go for a family bike ride

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Resources to help complete your GFHS BINGO card

The following resources can be used to help complete some of the items on your GFHS BINGO card. Feel free to be creative and make any changes to help suit these activities to your family:

Resources for B column:

Drip Drip Drop rules:



Resources for I column:

Mentos/Coke safety:



Scrapbook guide:



Resources for N column:

Slip and Slide:



Bubble recipe:



Resources for G column:

Bookmark ideas:



Popsicle recipe
(blender required)



DIY playdough:



Resources for O column:

Aluminum foil boat:



BINGO FAMILY ACTIVITY. Try these fun screen-free activities with your family! Complete all the activities in the same row either vertically, horizontally, or diagonally to get BINGO. Once you have completed a line go for the WHOLE card! We have provided links and resources for many of these activities below.

B	I	N	G	O
Learn to do a cartwheel	Go for a walk along the speed river	Write messages to your neighbors with sidewalk chalk	Make a water wall using your fence and empty containers	Reenact your favourite movies as a family
Play dress-up and make a play	Play board games	Build a world for your stuffed animals	Learn a magic trick	Make a time capsule and hide it in the house or yard
Go bird watching	Make a very long straw science activity		Build your own paper plate ring toss	Play with water balloons
Make an obstacle course with objects in your house	Take a dance class together as a family		Make and decorate a costume out of a cardboard box	Build a cardboard fort and decorate it
Learn a new card game	“Roll the dice” family workout (see resources)	Build a bird feeder and watch them enjoy	Start and nurture a garden indoors or outdoors	Spell your name fun workout routine (see resources)

BINGO FAMILY ACTIVITY. Try these fun screen-free activities with your family! Complete all the activities in the same row either vertically, horizontally, or diagonally to get BINGO. Once you have completed a line go for the WHOLE card! We have provided links and resources for many of these activities below.

Resources to help complete your GFHS BINGO card

The following resources can be used to help complete some of the items on your GFHS BINGO card. Feel free to be creative and make any changes to help suit these activities to your family:

Resources for B column:

Bird watching guide:



Card games for kids:



Resources for I column:

Long straw activity:



Roll the dice workout:



Resources for N column:

Bird feeder activity:



Resources for G column:

DIY Water wall:



Paper plate
ring toss:



Cardboard costumes:



Resources for O column:

Spell your name workout:



BINGO FAMILY ACTIVITY. Try these fun, outdoor activities with your family! Complete all the activities in the same row either vertically, horizontally, or diagonally to get BINGO. Once you have completed a line go for the WHOLE card! We have provided links and resources for many of these activities below (indicated with an asterisk “**”).

B	I	N	G	O
FREE SQUARE: Add your own outdoor activity!	Go for a skate at your local outdoor rink	Play outside at a local play structure (more fun after fresh snow)	Build snowperson or snowanimals (use snow paint for decoration)	FREE SQUARE: Add your own outdoor activity!
Build a snow fort	Create a scavenger hunt outdoors	Play snow soccer in deep snow	Make snowangels (another chance to use snow paint)	Play tic-tac-SNOW
Find a new hiking trail in your area	Use DIY snow paint to create a fun game (ex. Deep snow hopscotch)		Shovel a neighbor's driveway (wear a mask!)	Build a snow volcano*
DIY snow paint*	Make a snow shelter for a toy (leave it overnight to see if the shelter was effective!)		Use kitchen resources (ex. pans or muffin tins) as snow molds for a structure	Go to your local park and hunt for animal tracks
FREE SQUARE: Add your own outdoor activity!	Go tobogganing	Build and hang a bird feeder*	Build a slide out of snow*	FREE SQUARE: Add your own outdoor activity!

BINGO FAMILY ACTIVITY. Try these fun, outdoor activities with your family! Complete all the activities in the same row either vertically, horizontally, or diagonally to get BINGO. Once you have completed a line go for the WHOLE card! We have provided links and resources for many of these activities below (indicated with an asterisk “*”).

Resources to help complete your GFHS BINGO card

The following resources can be used to help complete some of the items on your GFHS BINGO card. Feel free to be creative and make any changes to help suit these activities to your family:

Resources for B column:

Snow Paint



<https://www.thebestideasforkids.com/snow-paint/>

Resources for I column:

No QR codes needed!

Resources for N column:

Birder Feeders: Frozen Bubbles:



Bird feeders: <https://happyhooligans.ca/32-homemade-bird-feeders/>
Frozen bubbles:

<https://www.steampoweredfamily.com/activities/creating-the-perfect-frozen-bubble/>

Resources for G column:

Snow Slide:



Snow Slide: <https://www.fatherly.com/play/how-to-build-giant-snow-slide-winter/>

Snow Volcano:



Resources for O column:

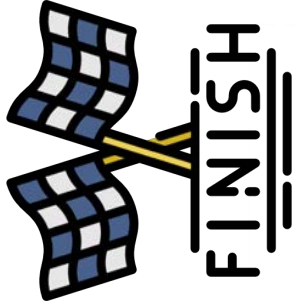
Snow Volcano: https://www.parents.com/fun/activities/outdoor/snow-activities-kids/?slide=slide_52f120a6-e25d-42c3-b4aa-d4799ddc0cbc#slide_52f120a6-e25d-42c3-b4aa-d4799ddc0cbc

FAMILY CHALLENGE BOARD GAME

CHOOSE ONE OF THE CHALLENGES ON THE ATTACHED SHEET! THE WINNER OF THE CHALLENGE GETS TO ROLL THE DICE AND MOVE THEIR PIECE ALONG THE BOARD!



Family Fun

4	5	6	16	17	18	
3		7	15		19	
2		8	14		20	
1		9	13			
Start!		10	12	11		



Family Challenge Board Game

Use this board game to break up sedentary time inside during these winter months! Play it multiple times and choose different challenges at random. Get the whole family involved, parents will find these challenges tough, too!! (“*” indicates there are pictures to accompany on page 3!)

Timed Challenges: see who can do all of these challenges for the longest!

- Balance on one leg: do both legs as separate challenges
- Balance a ruler or meter stick on your finger
- *Wall sit
- Statue challenge: who can stay still the longest!
- Mute challenge: who can stay silent the longest!
- Put together the puzzle: chose one with a small amount of pieces or make your own by cutting up the front of a cereal box!
- Balance a ball or balloon on your head
- *Plank or plank from knees
- Shake it off Challenge: fill empty tissue box with ping pong balls or light toys (Lego pieces for example), attach to your waist and shake them out!
- Indoor obstacle course: could do different themes of obstacle courses such as animal, adventure or space themed. Don't be afraid to get creative with the obstacles (toys, chairs etc.)!
- Obstacle course popsicle stick dice balance: hold a die or Lego pieces on the end of a popsicle stick, while navigating a simple obstacle course
- *Lunge or split squat hold: do both legs as separate challenges
- Hula-hoop: if you have a clear space indoors
- Skipping: if you have a clear space indoors (for example, garage, patio/back deck)

Guelph Family

Health Study

- Facial Tissue Straw Challenge: who can move the most facial tissues from one bowl to another bowl on the other side of the room in 60 seconds
- Balloon keep-up: see who can keep the balloon in the air the longest

Untimed Challenges:

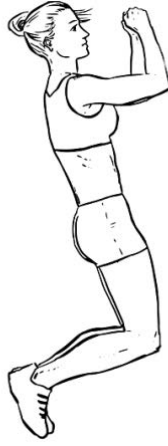
- Water bottle flip: who can get it upright in the least amount of attempts
- Paper airplane challenge: whose flies the furthest? can all make your own planes or make them for the kids!
- Face the cucumber slice challenge: move a cucumber slice down your face into your mouth without your hands
- No thumbs challenge: try to do simple task such as colouring or eating cereal without using your thumbs.
- Write with the wrong hand challenge: who can write/draw the neatest or quickest with the wrong hand
- Blindfolded food tasting: see who is the best at guessing between different foods
- Try not to laugh challenge: watch a funny video and see who can hold it in the longest
- Say anything categories: choose a category (food, animals, etc.) and go around saying something in that category (if the category is foods, you could say apple). First one to stumble is out, go until you have a winner!
- Finish the lyrics: Disney movie songs only! Start the song and pause before a well-known line and if you get it wrong, you're out!
- What's in the Box Challenge: using only your hands, you have to guess what is in the box. If you get it wrong, you're out!
- Freeze Dance: last one to stop is out!
- Popsicle stick LEGO piece stack: who can stack the most dice on the end of a popsicle stick
- Paper toss trash bin: first shot wins!
 - ◆ Or: see who can make the most of 5, 10 or any number you can imagine
- Set up a half-filled water cup at the end of the table, first person to make a shot with a ping pong ball wins!
 - ◆ Or: see who can make the most of 5, 10 or any number you can imagine

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*Wall sit: see who can hold for the longest at the bottom!



*Plank variations and modified plank: can also do an elevated plank using a table or couch that is pushed against a wall



*Split squat hold: see who can hold for the longest at the bottom!



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