

## WELCOME to the 8<sup>th</sup> Annual WinterKids Winter Games!

These 4 weeks bring the WinterKids mission of helping children develop healthy lifelong habits through education and fun, outdoor winter activity to life for over 10,000 students and teachers. Thank you for being a part of this fantastic program!

This year's theme is **WEATHER** and everyone will become little scientists, going outside and collecting weather data every school day. Each week will have a different weather topic of focus for our learning and adventures outside as we work our way through **TEMPERATURE**, **PRECIPITATION**, **WIND**, and **CLOUDS**, all guided along by this PLAYBook.

As the **WEATHER** changes, and as our winters change, WinterKids is here with you to adapt and help answer questions along the journey. Best of luck in this year's competition, and most of all – keep having fun!

## WinterKids Mission

"WinterKids helps children develop healthy lifelong habits through education and fun, outdoor winter activity."

## Take the adventure further!

The WinterKids App is your family's ticket to **outdoor** winter fun!





GET IT ON Google Play

## Winter Games Oath

"In the name of Moving, Learning, and Exploring **outdoors**; we promise to take part in these Winter Games, honoring and abiding by the rules and the spirit of fairness, inclusion, and equality. Together we stand in solidarity and commit our school community to playing The Games with creativity, with integrity, and without discrimination. We do this for the health of our school and to make our world a better place through the enjoyment of the **outdoors**."

## WEEK 1: Temperature

#### **ACTIVITY 1** Daily Weather Observations

During this year's Winter Games, everyone is going to become scientists – collecting observations and recording data. Every school day you will need to get **OUTSIDE** and take **WEATHER** measurements to be recorded in the week's data table below. Every week, as you learn more about the **WEATHER**, you will add more information to your daily **WEATHER** observations. Collecting data is the most important step in science, because without that information we can't create **WEATHER** forecasts or observe changes in our Earth's climate. For Week 1, you will keep track of the date, **TEMPERATURE**, and have space to mention any personal **WEATHER** observations that catch your eye.





**INCENTIVE:** 

Submit your Opening Ceremony Video for this week's **Moment of the Week.** 

DATE	TEMP (°F) · • .	OBSERVATIONS	
			i
			A.
	and the second second second second		
			<b>D</b> <sup>1</sup>
			S
and the second se			2
		7	

#### **ACTIVITY 2** The "Great" Heat Escape

Are you ready to bring the heat?!?! For this outdoor activity from the Learn Outside Guide, you will either be playing the role of HEAT trying to escape our atmosphere or CARBON DIOXIDE trying to keep the HEAT here – all in an active lesson about the Earth's greenhouse effect.

To describe the greenhouse effect, we need only look at our planetary neighbors in the solar system. Mars does not have enough of a greenhouse effect so during the day it gets very hot and at night it gets very cold because it does not have enough of an atmospheric blanket to hold in its heat at night. Our other neighbor, Venus, has too much of a greenhouse effect, so it is always so hot that even metal melts on its surface, because it has too thick of an atmospheric blanket and holds in too much heat. Earth has just the right amount of atmospheric blanket so our greenhouse effect holds in enough of the day's heat so that everything doesn't get too cold at night but it lets out enough heat, so things don't get too hot during the day. As we add more carbon dioxide into the atmosphere from actions like burning fossil fuels, our atmospheric blanket gets thicker, our greenhouse effect gets stronger, and our planet's **TEMPERATURE** gets warmer.

Learn Outside Guide PAGE 216

WinterKibs



#### **ACTIVITY 3** Getting In The Know – Global Warming

Just like you, the Earth has a **TEMPERATURE**. Your fingers may get chilly when outside in the winter and your feet may get hot walking barefoot across the driveway in the summer, but when YOUR body temperature is taken it stays the same. If your body temperature rises, even just 2 or 3 degrees, it means you have a fever, are quite sick and may need to have a doctor or nurse help you get feeling better again.

Much like you have a body temperature, the Earth has a planet **TEMPERATURE**. Different areas of the Earth can get cold in the winter and hot in the summer, or even cold and stormy one day and warm and sunny another day all in the same week – but the Earth's planet temperature remains the same and has for as long as human beings have lived here. Certain activities are causing the Earth's planet **TEMPERATURE** to rise just a couple of degrees, but like us, that is enough to give it a fever - but ALL of us are able to help in trying to get the Earth better again.

WEATHER is what's happening around us in the atmosphere on a daily basis – the things we are observing and recording over the 4 weeks of the Winter Games. Climate is the long-term conditions we have come to expect, like cold winters and hot summers in Maine – and include our Earth's planet **TEMPERATURE**. Understanding our warming climate helps us better understand the changes we see in our daily **WEATHER**.

But first things first as we continue to explore **TEMPERATURE** this week: research, lookup, find out, what is your body **TEMPERATURE** supposed to be AND what is the Earth's latest planet **TEMPERATURE**?



5

#### **ACTIVITY 4** Weather Word Search

Search up, down, and diagonally for the **WEATHER** vocabulary words listed below that we'll be using during the Winter Games.

С	F	S	Q	D	L	W	Ρ	Т	А	Y	В	Е	R	W
F	L	Ι	Т	Ν	Х	н	R	М	J	Υ	L	Т	F	Е
W	Т	Ι	Ρ	Q	Y	S	Е	V	Z	Z	В	G	V	А
L	L	Е	М	т	Z	К	С	L	Е	А	R	S	В	т
Е	С	Х	М	А	Y	Т	Ι	А	U	R	Е	L	W	н
R	G	0	0	Ρ	т	Y	Ρ	F	Т	н	Е	Е	н	Е
Т	Ν	С	V	S	Е	Е	I	0	Т	т	Z	Е	А	R
Y	А	L	Е	Т	L	R	Т	G	0	0	Е	Т	T	Z
Y	С	0	R	0	Q	W	А	D	V	Z	Q	R	L	С
К	Ρ	U	С	R	Е	U	Т	т	Т	V	D	D	Е	U
V	0	D	А	М	D	Ν	I	х	U	W	I	Ν	D	D
Q	R	S	S	V	L	R	0	F	А	R	В	L	W	Z
S	0	н	т	U	С	А	Ν	G	Ι	к	Е	J	т	к
Μ	н	Z	Y	0	к	I	Q	S	R	С	Ν	С	к	н
А	R	S	Ν	0	W	Ν	В	W	А	Y	W	U	Ρ	к

AIR	HAIL	SLEET
BREEZE	OVERCAST	SNOW
CLEAR	PRECIPITATION	STORM
CLIMATE	RAIN	TEMPERATURE
CLOUDS	SCATTERED	WEATHER
		WIND

6

#### **ACTIVITY 5** Friendship Friday! Being Friendly to our Planet: Lights Out for Movie Night

Plan out a movie night. Gather up family or friends to watch one of your favorite movies, however you watch – streaming or from a disc. Get all your snacks ready and get everyone comfortable with seating and blankets, because once the movie starts ALL the lights go out until the end of the movie!

Electricity is one of the ways we use energy, and depending on how your area makes that electricity, some of it comes from burning fossil fuels like natural gas – which contributes to our warming planet. A fun movie night in the dark can serve as a good reminder about how we use energy and about making good choices when it comes to turning off lights when we leave the room and shutting down things like computers, tablets, and TVs when not using them. These habits also help to lower our home's electricity bills. During the winter months, the sun sets earlier so we rely more on lights, so it's a great time to remind ourselves to use those lights wisely and not light up rooms we're not using.

The switch to LED lighting has helped reduce light's energy needs, but we must help keep our energy use efficient as our state and utilities work to transition electricity production towards 100% renewable resources like solar and wind power. Have you seen solar panels in your town?

DID YOU WATCH





SNGCKP8S.

## Fun fuel for kids.

hannafordsnackpals.com



## WEEK1 GOING FURTHER: DIY FROZEN SUNCATCHERS

Collect natural treasures and freeze them in water overnight to make a colorful winter suncatcher!

Complete the weekly activities to start earning your Snack Pals Winter Games Badge and unlock secret coloring pages! To start now, scan here:





#### We are building a photo album of your Winter Games Play-Along Track fun!

All submitted photos are automatically entered into our prize giveaway. Use the QR code to link to photo upload instructions.



G

PLAY-ALONG TRACK!

Check the WinterKids Winter Games Facebook Group to see the submitted photos.

## CONGRATULATIONS ON COMPLETING WEEK 1!

## Remember to upload your Moment of the Week (MOW) for the chance to get the bonus point!

#### This week's MOW: Opening Ceremony Video Edit (15 sec)

Kicking off the Winter Games really sets the tone for the rest of the competition. Capture video of your school celebrating the spirit of the Games and this year's theme of **WEATHER**, and edit it down to 15 seconds or less. If you edit the video with music, please select something that will allow it to be posted on social media. All MOW submissions will be sent to the judging panel **WITHOUT** the school or town name included. The judge's panel is made up of representatives of the Winter Games sponsors. The judges will vote on these anonymous videos with the winning video getting this week's bonus point. Each school's MOW votes are tracked for use in the case of any tie breakers (other than a 1st place tie).

Use the QR code for Week 1 on this page to link to the Winter Games site for entering your Week 1 rubric scores, your supporting evidence, and to upload your MOW video. Everything **MUST** be turned in by **5 PM SUNDAY** to be counted.

Tune into WMTW Channel 8 between 4:00 - 4:30pm and 6:00 - 6:30pm on Tuesday to see the Moment of the Week winner or log on to watch at wmtw.com.







Check out the leaderboard at **WinterKids.org** on Wednesday to see an update on how your school is doing.

# WEEK 1

**NEEK 2** 

## **WEEK 2: PRECIPITATION**

#### **ACTIVITY 1** Daily Weather Observations

For Week 2, we will be adding the amount and kind of precipitation to our daily **WEATHER** observations. **PRECIPITATION** is water falling to the Earth as a liquid or solid. This can be in the form of rain, snow, hail, sleet (when snowflakes melt in warmer air then refreeze in colder air near surface), freezing rain (when water drops freeze once they hit the cold surface), or graupel (when water droplets freeze onto snowflakes).

Competitive schools have received a Winter Games rain gauge that can be used for measuring rain amounts – make sure all participating classes know where the rain gauge is being placed and please be respectful and leave the gauge as you found it for other classes to check. Rain gauges should be placed in an area protected from strong winds but not near obstacles that could either block rain or splash rain into the gauge.

For snow, review this week's activity 3 to learn how to properly measure snow. Keep your tape measure handy.





**INCENTIVE:** 

Submit your Weather Meme Photo for this week's **Moment** of the Week.

WEEK 2

Learn Outside Guide PAGE 204

#### ACTIVITY 2 "AL" THE SNOWMAN

How light or dark surfaces are plays a role in their **TEMPERATURE** and therefore plays a role in how long snow and ice stick around. Making use of your tape measure, we are doing a multiday activity observing how 2 snow people hold up to this week's **WEATHER!** 

The Albedo Effect looks at how much of the sun's heat is reflected by a surface. Snow, ice, and light colors are good at reflecting the sun's heat – which adds to keeping things cooler. Asphalt, roofs, and dirt are darker in color and absorb heat – which adds to things warming up faster.

11

::

WinterKibs

NEEN

#### **ACTIVITY 3** SNOW BOARD – MEASURING SNOW AMOUNTS

WHERE you take your snow measurements is just as important as how accurate your measurement reading is. You do not want to measure snow where it drifts into high piles or where snow is partially blocked by tree cover or building overhangs. The best way to keep track of snow totals is to use a snow board – not the kind you ride down a mountain, but the kind scientists use to measure snow. That way, you are always measuring at the exact same spot.

A snow board can be any light color board (dark colors can heat up more and melt some of the snow – see this week's activity 2 to understand albedo more). The board should be flat, and at least 2 feet by 2 feet square makes a great size. Place it somewhere flat, easily accessible, and out in the open. It can be on the ground, on top of previously fallen snow, or even on top of a table, patio, or deck. You may want to mark the location with an object so you can find the snow board once it is covered in snow. Prior to a snow event you want to make sure the snow board is clear (or placed on top of any other snow). It is best to take your measurement as soon as the snow stops, but you can also take measurements up to 4 times a storm and add up your total. Push your outstretched measuring tape straight down into the snow until it reaches the snow board. You want it straight up and down, because if you have it at an angle, it will give a higher than accurate reading. Write down how high the snow reaches on your measuring device in your data table for Activity 1. When done, clear all the snow off the snow board so it is ready for the next time you come out to measure.

WEEK 2

#### ACTIVITY 4 MEASURE ME

Accurate measurements are important. The more measuring you do, the more data you have, the better you get with making informed predictions based on experience. Accurate measuring devices are crucial to collecting good data. Accurate **WEATHER** data leads us to better **WEATHER** predictions, or **WEATHER** forecasts.

With Activity 4, you are making height predictions and measuring out to test your accuracy. How well did your height forecast go?





**NEEK 2** 

#### **ACTIVITY 5** Friendship Friday! Being Friendly to our Planet: Collecting Rain

After the air we breathe, water is the most important resource for life. Humans have to pump clean water from reservoirs and wells to drink, but when it comes to watering plants we can save some of that clean water we need for ourselves by using rainwater (or melted snow) for house plants. They don't mind, and in fact they often grow better with rainwater than with tap water.

The first thing you need is at least one inside plant. Maybe you already have some plants at home or in your classroom. If not, work together as a class to get one for your classroom. There are plenty of inexpensive plants you can buy, but even better is getting one for free. Many types of plants like peace lilies, spider plants, and snake plants can have small sections divided off and replanted to grow on their own. These examples are also on NASA's list of good plants for indoor air quality. I'm sure someone in your class has a plant that can be divided and that new plant could become your class's plant. Next, you need to collect rain or snow. Some houses have large barrels to collect enough water to take care of an entire garden for the summer, but we just need enough for a houseplant – and its winter. Before the next precipitation event, place out a beach bucket or some open jars. Once the storm is over, bring your container(s) inside to warm up. If it was rain, you just need it to warm up to room temperature before watering. If it was snow, you need it to melt to water to give to the plants – you do not want to stress out the plant by making them too cold.

Continue doing this, even after the Winter Games and see how frequently you can water the plants with rain/snow water instead of having to use tap water. If you find you are collecting a lot of water, you can fill an old water bottle or jug to keep inside while returning your bucket or jars outside to collect more.





SNGCKP3 S.

#### Fun fuel for kids. hannafordsnackpals.com

### WEEK 2 Going Further: Brandie and Pals Clouds

Use sliced bananas and blueberries to create your own banana cloud!

Complete the weekly activities to start earning your Snack Pals Winter Games Badge and unlock secret coloring pages! To start now, scan here:



WEEK



#### We are building a photo album of your Winter Games Play-Along Track fun!

All submitted photos are automatically entered into our prize giveaway. Use the QR code to link to photo upload instructions.



G

PLAY-ALONG TRACK!

Check the WinterKids Winter Games Facebook Group to see the submitted photos.

15

#### CONGRATULATIONS ON COMPLETING WEEK 2!

## Remember to upload your Moment of the Week (MOW) for the chance to get the bonus point!

#### This week's MOW: Weather Meme Photo

Who doesn't appreciate a good meme? Use a classic meme format or create your own format and submit your school's best **WEATHER**-related meme for bonus point contention. The meme should be turned in as a single image. All MOW submissions will be sent to the judging panel **WITHOUT** the school or town name included. The judge's panel is made up of representatives of the Winter Games sponsors. The judges will vote on these anonymous photos with the winning photo getting this week's bonus point. Each school's MOW votes are tracked for use in the case of any tie breakers (other than a 1st place tie).

Use the QR code for Week 2 on this page to link to the Winter Games site for entering your Week 2 rubric scores, your supporting evidence, and to upload your MOW photo. Everything **MUST** be turned in by **5 PM SUNDAY** to be counted.

Tune into WMTW Channel 8 between 4:00 - 4:30pm and 6:00 - 6:30pm on Tuesday to see the Moment of the Week winner or log on to watch at wmtw.com.

Check out the leaderboard at **WinterKids.org** on Wednesday to see an update on how your school is doing.







## WEEK 3: WIND

#### **ACTIVITY 1** Daily Weather Observations

This week's **WEATHER** data will add **WIND** to your records. Week 3's Activity 3 explains the **Beaufort (pronounced BOW-FORT) Wind Scale** which uses observations of what the **WIND** is powerful enough to move outside to assign a **WIND** category of strength for current conditions. Get familiar with activity 3 before taking on this week's daily **WEATHER** collection. Don't forget, with the sun's rays coming both from the sky and being reflected up from the snow and ice on the ground, wearing sunglasses in the winter can be as important as wearing them in the summer.





INCENTIVE: Sunglasses

COMPETITIE TRACK!

Submit your Family Wind Photo for this week's **Moment of the** 

Week.

WEEK 1

DATE	TEMP (°F)	AMOUNT OF PRECIPITATION (IN)	KIND OF PRECIPITATION	WIND STRENGTH
- 70				1
	i i			1
				i and a constant
2000-0-000-0-0-0-0-0-0-0-0-0-0-0-0-0-0-				
-				and a second

#### **ACTIVITY 2** EXPERIENCING THE OUTDOORS THOUGH ART

For the last few weeks you have been going outside daily to observe the **WEATHER** for collecting data, but how about if today, in addition to recording the **WEATHER** data, you also used art to record the **WEATHER** experience? Visually capture your outdoor experience in a work of art with p154 in the Learn Outside Guide. How do you draw the **WIND** or the cold?



WEEK 2

## DRAW YOUR WEATHER EXPERIIENCE!

# WEEK 2

WEEK

WIND is a force, caused by the atmosphere trying to balance out high and low pressures or warm and cool **TEMPERATURES**. You cannot see the **WIND** itself, but we all know when it is windy outside. How do you see the **WIND**? How do you know it is windy? \*On a separate piece of paper write about how you "see" the **WIND**. Feel free to include drawings on the page to illustrate your point.

Anemometers are instruments that can tell you the exact speed the wind is blowing –

most frequently using 3 cups that spin in the WIND, but there are also WIND strength classifications based on the effect the WIND has on your environment called the Beaufort Wind Scale. Use the terms below to record the WIND rating during your daily WEATHER observations this week. Don't forget to wear your sunglasses to keep any dust or snow out of your eyes that may get blown by the WIND while you're out there observing.

NEMOMETER

WIND STRENGTH CLASSIFICATION	DESCRIPTION
CALM	SMOKE FROM CHIMNEYS, ETC RISES STRAIGHT UP
LIGHT AIR	SMOKE DRIFTS IN WIND DIRECTION, WIND VANES UNMOVED
LIGHT BREEZE	FEEL WIND ON FACE, LEAVES RUSTLE, WIND VANES MOVE
GENTLE BREEZE	LEAVES AND TWIGS MOVE, FLAGS EXTEND
MODERATE BREEZE	LEAVES AND PAPER ARE LIFTED, BRANCHES MOVE
FRESH BREEZE	SMALL TREES SWAY
STRONG BREEZE	LARGER BRANCHES MOVE, UTILITY WIRES WHISTLE
NEAR GALE	TREES IN MOTION, EFFORT NEEDED WALKING INTO WIND
GALE	TWIGS BREAKING OFF TREES, WALKING VERY DIFFICULT
STRONG GALE	LIGHT DAMAGE TO BUILDINGS
STORM	TREES BROKEN OR UPROOTED, HEAVY DAMAGE TO BUILDINGS

#### ACTIVITY 4 STICK TO NORTH

When scientists record **WIND** data, they not only keep track of the **WIND'S** speed, but also the **WIND'S** direction. Wind direction is named for where the wind is blowing **FROM**, so a **NORTH WIND** is a wind that is blowing from the north. In Maine, Nor'easters are such intense storms because the **WIND** is coming from the northeast – with the air to our north typically being colder and the ocean being to our east and feeding moisture into fueling these storms.



Stick To North from the Learn Outside Guide is an activity to find direction when you don't have a compass. Make sure to pick a sunny day to do this activity as you'll need to be able to see shadows. Once you have finished this activity you can use the compass on your thermometer key chain to see how accurate your stick compass is.



VEEK

#### ACTIVITY 5 Friendship Friday! BEING FRIENDLY TO OUR PLANET: WIND TURBINES

As we work to curb climate change, burning fossil fuels is being replaced with renewable energy sources like solar panels and wind turbines. Areas along the shore and hilltops experience **WIND** consistently and are great places to harness the **WIND** for electricity. Engineers have worked hard to create turbine shapes that harness as much **WIND** as possible and are constantly improving blade designs and materials to make them even more efficient. Here's your chance to try and make the fastest spinning **WIND** turbine in your class!

Collect crafting materials and come up with a design based on whatever you are able to find. It can be simple like folding a piece of paper into a pinwheel shape and using a thumbtack to stick through the pinwheel center and into the top of a pencil's eraser so you can hold the pencil in the **WIND'S** direction. Or it can be more complex, using a paper towel roll as the turbine's upright stand, unfolded paperclips or straws used as an axle pushed through holes at the top of the tube, and folded paper or cardboard shapes for the blades to catch the **WIND**.

Get creative and design your own **WIND** turbine. Decorate your turbine to make it your own. On the next day with some **WIND**, have everyone in the class go outside to see whose spins the fastest and whose lasts the longest.





SNGCKP3 S.

## Fun fuel for kids.

hannafordsnackpals.com

## WEEK 3 **GOING FURTHER: SNACK PALS** WIND SOCK

Create a colorful windsock to hang outside and see how it moves in the wind!

Complete the weekly activities to start earning your Snack Pals Winter Games Badge and unlock secret coloring pages!

To start now. scan here:





#### We are building a photo album of your Winter Games Play-**Along Track fun!**

All submitted photos are automatically entered into our prize giveaway. Use the QR code to link to photo upload instructions.





PLAY-ALONG TRACK!

Check the WinterKids Winter Games Facebook Group to see the submitted photos.

/EEK

## CONGRATULATIONS ON COMPLETING WEEK 3!



## Remember to upload your Moment of the Week (MOW) for the chance to get the bonus point!

#### This week's MOW: Family Wind Photo

Take a photo of your family or group of friends all pretending like they are walking in gale force winds (check this week's activity 3 Beaufort Scale for what gale force **WINDS** are like). Have your school send their favorite in for the MOW competition. All MOW submissions will be sent to the judging panel **WITHOUT** the school or town name included. The judge's panel is made up of representatives of the Winter Games sponsors. The judges will vote on these anonymous videos with the winning video getting this week's bonus point. Each school's MOW votes are tracked for use in the case of any tie breakers (other than a 1st place tie).

Use the QR code for Week 3 on this page to link to the Winter Games site for entering your Week 3 rubric scores, your supporting evidence, and to upload your MOW video. Everything **MUST** be turned in by **5 PM SUNDAY** to be counted.

Tune into WMTW Channel 8 between 4:00 - 4:30pm and 6:00 - 6:30pm on Tuesday to see the Moment of the Week winner or log on to watch at wmtw.com.

Check out the leaderboard at **WinterKids.org** on Wednesday to see an update on how your school is doing.







VEEK 2

## WEEK 4: CLOUDS

INCENTIVE: Observer Notepad

#### **ACTIVITY 1** Daily Weather Observations

As we enter Week 4, our final week of the games, we are adding **CLOUDS** to our weather observation data. Week 4's Activity 3 will teach you how to identify different types of **CLOUDS**, but for this week's observations we want to also include the **CLOUD** cover: **CLEAR** (no clouds), **SCATTERED** (some clouds but also some clear sky), **OVERCAST** (sky is totally covered by clouds).

Stretch it out every day as you go outside and look down at the precipitation measurements, look forward at the temperature, look in all 4 directions for the wind, and look up for the **CLOUDS**.



Submit your Closing Ceremony Highlight Video for this week's **Moment of the Week.** 





DATE	TEMP (°F)	AMOUNT OF PRECIPITATION (IN)	KIND OF PRECIPITATION	WIND	CLOUD COVER	CLOUD TYPE
2						

WEEK 1

WEEK 2

WEEK 3

WEEK 4

**NEEN** 

#### **ACTIVITY 2** Making A Weather Report

What better way is there to stay warm while collecting your winter **WEATHER** conditions than combining it with a physical activity? Run from station to station collecting current **WEATHER** data to record at each station. If your school doesn't have all the **WEATHER** instruments listed in the Learn Outside Guide activity, you can modify the stations with the different **WEATHER** parameters we are observing this week.



#### MAINE'S TOTAL WEATHER



VEEK 2

#### ACTIVITY 3 CLOUD IDENTIFICATION

In order to talk to each other about what we observe in the sky, we need to all use the same terms for the different types of **CLOUDS** we see. By identifying **CLOUDS**, we can get an idea about what's going on in our atmosphere and make predictions about what kind of weather is heading our way.

**CLOUDS** are named after their shape and their height above the surface of the Earth. The primary **CLOUD** shapes are:

- Cirrus (wispy, hairlike clouds)
- Stratus (layered, flat clouds)
- Cumulus (puffy, heaped clouds)
- Nimbus (precipitation, stormy clouds)

The primary **CLOUD** heights are:

- High (cirro)
- Mid-level (alto)
- Low-level (strato)

These terms are frequently combined. For example, the types of **CLOUDS** that cause lightning and thunder are tall, puffy, storm **CLOUDS** so we call them cumulonimbus **CLOUDS** (combining the puffy and stormy descriptors). Similarly, the layers of storm **CLOUDS** we may see during snow or rainstorms are called nimbostratus **CLOUDS** (layered, stormy clouds). Use these **CLOUD** types to add to this week's daily weather observations: Cumulus, Cumulonimbus, Nimbostratus, Altocumulus, Stratocumulus, Stratus, Cirrus, Cirrocumulus.

While out observing **CLOUDS**, use your notepad and pen this week to keep track of any interesting shapes you see when looking towards the sky. Maybe you spot a cumulus **CLOUD** that looks like a rabbit or draw a cirrus **CLOUD** you saw that looks like a horse's tail.



## ACTIVITY 4

Questions like: when will we get our first frost, when will the ice melt off the lakes, and will this storm be cold enough to be snow or will it be freezing rain are all ways that **TEMPERATURES** affect us and also affect local businesses. The **WEATHER** impacts if people can do their jobs and even how an entire industries' season will go. In this activity from the Learn Outside Guide you will research the business side of the ski areas, one of our state's **WEATHER** dependent industries.



#### ACTIVITY 5 Friendship Friday! BEING FRIENDLY TO OUR PLANET: SPREAD THE WORD

There are an incredible amount of things you can do to help the Earth's climate, no matter your age or town you live in. Pick one thing to do – whether it's something you learned this week, something you've looked up on the internet, or something that your family does regularly to help our Earth – and make up a poster telling others of this one thing they can do. Think of it like an advertisement for the environment or a public service announcement spreading information.

For this week's Closing Ceremonies, have everyone hang up their posters so the walls are lined with ideas for people to see the great many ways that each and every one of us can have an impact on the climate and on the world around us.





PLAY-ALONG TRACK! SNGCKPals

#### Fun fuel for kids. hannafordsnackpals.com



## WEEK 4 Going Further: Carlos Carrot's Cloud Finder

Identify different cloud types in the sky with Carlos Carrot's Cloud Finder!

Complete the weekly activities to start earning your Snack Pals Winter Games Badge and unlock secret coloring pages! To start now, scan here:





#### We are building a photo album of your Winter Games Play-Along Track fun!

All submitted photos are automatically entered into our prize giveaway. Use the QR code to link to photo upload instructions.





Check the WinterKids Winter Games Facebook Group to see the submitted photos.

VEEK

VEEK 2

## CONGRATULATIONS ON COMPLETING WEEK 4!

## Remember to upload your Moment of the Week (MOW) for the chance to get the bonus point!

#### This week's MOW: Closing Ceremony Highlight Video

Edit together highlights from your school's Winter Games experience and this week's closing ceremony. It should be at least 30 seconds but no longer than 1 minute long. If you edit the video with music, please select something that will allow it to be posted on social media. All MOW submissions will be sent to the judging panel WITHOUT the school or town name included. The judge's panel is made up of representatives of the Winter Games sponsors. The judges will vote on these anonymous videos with the winning video getting this week's bonus point. Each school's MOW votes are tracked for use in the case of any tie breakers (other than a 1st place tie).

Use the QR code for Week 4 on this page to link to the Winter Games site for entering your Week 4 rubric scores, your supporting evidence, and to upload your MOW video. Everything **MUST** be turned in by **5 PM SUNDAY** to be counted.

Tune into WMTW Channel 8 between 4:00 - 4:30pm and 6:00 - 6:30pm on Tuesday to see the Moment of the Week winner or log on to watch at wmtw.com.

Check out the leaderboard at **WinterKids.org** on Wednesday to see an update on how your school is doing.







#### ALL WINTERKIDS PROGRAMS ARE MADE POSSIBLE BY:

Major Community Sponsor:



**Exclusive Television Partner:** 



Supporting Sponsors:













a Point32Health company

THE WINTERKIDS WINTER GAMES ARE BROUGHT TO YOU BY:





hannafordsnackpals.com

Weekly Sponsor:



#### Contributing Sponsors:





506 Main Street, Suite 10 😤 Westbrook, ME 04092 😤 (207) 871-5700 😤 WinterKids.org