Weather Days Series

Deborah Kerbel illus. Miki Sato

STORY SUMMARY

In *Windy Days, Snow Days, Rainy Days,* and *Sunny Days,* sparkling couplets and intricate collage illustrations celebrate all the fun activities that seasonal weather makes possible for young children.



Pair this book with:

- Outside, You Notice by Erin Alladin illus. Andrea Blinick
- Sun in My Tummy by Laura Alary illus. Andrea Blinick

Further Resources:

DIY Weather Station for Kids – Inventors of Tomorrow https://inventorsoftomorrow.com/2018/01/22/diy-weather-station-for-kids/ **Deborah Kerbel** is an award-winning author of novels and picture books for young readers. Her novels have been shortlisted for the Governor General's Literary Award, the Canadian Library Association YA Book of the Year, and the Manitoba Young Reader's Choice Award. Deborah lives in Thornhill, Ontario, with her husband, two book-loving children, and a schnoodle named Alfredo.

Miki Sato is a Japanese-Canadian illustrator who uses a variety of different textures and materials to create three-dimensional images. Originally from Ottawa, she moved to Toronto to complete her degree in illustration from the Ontario College of Art and Design. Her first picture book, *Snow Days*, was a finalist for the Elizabeth Mrazik-Cleaver Canadian Picture Book Award, which honors outstanding artistic talent.



THEMES

Hands-On Science, Sustainability, Weather, Seasons, Active Play

BISAC CODES

JUV009100 JUVENILE FICTION / Concepts / Seasons JUV029020 JUVENILE FICTION / Science & Nature / Weather

CURRICULUM CONNECTIONS

Language Arts: comprehension; Science: observation, scientific experimentation, engineering design; Visual Art: collage, mixed media; Music: music appreciation, composition





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THIS GUIDE CONTAINS:

Αςτινιτγ	MAIN SUBJECT AREAS	SPECIFIC SKILLS AND TOPICS
Read-Aloud	Comprehension	activate prior knowledgeinfer, predict, make connections
Walks	Science	observation skills
Science Activities	Science	scientific experimentationengineering design
Art	Visual Art	 collage mixed media watercolor painting
Music	Music	music appreciationcomposition



This set of four books can form the basis for a yearlong study of seasons and weather. The activity descriptions begin with autumn, (because many school years begin then) but educators may begin at any point in the year. The books are based on weather, but they correlate nicely with the seasons.



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AUTUMN (WINDY DAYS)



Read this book on the first day of autumn, to set the tone for celebrating the new season.

Learning Expectations:

Students will:

- identify reading comprehension strategies (e.g. activate prior knowledge, infer, predict, make connections) and use them before, during, and after reading to understand texts
- assess ways in which daily and seasonal changes have an impact on human activities, the environment, and living things in the natural environment

You Will Need

- Windy Days
- dry milkweed pods (optional)
- magnetic letters

How To:

Before Reading

If possible, place some dry milkweed pods on the science table for students to examine a day or two before reading. On the day of reading, show the cover. Ask students what season it looks like, and what the weather might be. Read the title, author, and illustrator. Read the dedication page.

During Reading

Read expressively, pausing for a few moments on each page to allow students to examine the illustrations closely, and to comment if they wish. On the last page of the text ("Icy wind...), invite students to tell what season is now beginning.

After Reading

- Invite students to share some experiences they have had on a windy day.
- On another day, read through the book again, with the purpose of

noticing how the season progresses from the beginning of the book to the end: at first, milkweed is still flowering and child is dressed in long sleeves; next, leaves are a mix of green and fall colors; then geese fly south; apples are ripe; leaves are fully turned; leaves have fallen; Halloween comes; children are dressed in coats, earmuffs and scarf; finally, snow begins to fall.

- Throughout the season, reread the book for other purposes. For example, pause before the last word on each page and have students provide the rhyming word; have a student point to the words while an adult reads; have students search for the word wind on each page.
- Have students use magnetic letters to make the high-frequency word in, then add letters in succession to change it to win, wind, and windy.

ACTIVITY 1: WALK

Students can practice their powers of observation on a walk that is all about "noticing".

Learning Expectations:

Students will:

• develop early research skills by practising first-hand, direct observation of objects, living things and phenomena

You Will Need

- an outdoor area, ideally in a natural environment
- digital camera, tablet or phone (one, or a class set)
- printer and paper

How To:

 Prime students by encouraging them to get four of their five senses ready: sight, hearing, smell, and touch (including both how the weather makes their body feel, and things they can touch with their fingers). As extra incentive, you could have warm apple cider ready upon your return, so they can exercise their fifth sense, taste.



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- 2. Take students on a walk in as natural an area as possible, ideally on a dry, windy day.
- 3. Take many photos during the walk.
- 4. Invite students to describe the wind at this moment in time. Is it gentle, steady, blustery, icy?
- 5. Collect a few seed pods, always ensuring you leave many more than you take.
- 6. Collect some fallen leaves.
- 7. Encourage students to notice things that move in the wind, such as flags, trees, their own hair and clothing, etc.
- 8. After the walk, invite students to place their found items on the science table if they wish. When the season is over, the items can be returned to nature.
- 9. Make a book of your windy-day photos.

ACTIVITY 2: SCIENCE ACTIVITIES

Students become hands-on scientists in this variety of fun activities.

Learning Expectations:

Students will:

- use a scientific experimentation process and associated skills to conduct investigations
- use an engineering design process and associated skills to design, build, and test devices
- demonstrate an understanding that energy is the ability to move or change something
- demonstrate an understanding that humans get the energy resources they need from the world around them, and that the supply of many of

these resources is limited

 assess ways in which daily and seasonal changes have an impact on human activities, the environment, and living things in the natural environment

You Will Need

- Windy Days
- chart paper
- stickers in different shapes or colors
- internet
- for wind socks: paper, tissue paper, scissors, glue, string
- for rain gauge: 2 L plastic bottle, small rocks, ruler, duct tape, permanent marker
- other specific materials for weather station instruments, listed in linked video
- for pinwheels: construction paper, push pin, straws or pencils
- for sailboats: wood scraps, pencils, plasticine, plastic bags or cloth, scissors, tape, wading pool
- for experiments related to last page of *Windy Days*: pinwheels, found objects, kites, digital camera, printer and paper

Links:

<u>"How to Make a windsock for Children: 13 Steps (with Pictures)</u>", Wikihow https://www.wikihow.com/Make-a-Windsock-for-Children

<u>"How to Build a Rain Gauge: 15 Steps (with Pictures)</u>", Wikihow https://www.wikihow.com/Build-a-Rain-Gauge

<u>"DIY Weather Station for Kids"</u>, Inventors of Tomorrow https://inventorsoftomorrow.com/2018/01/22/diy-weather-station-for-kids

<u>"How to Make a Paper Pinwheel"</u>, The Spruce Crafts https://www.thesprucecrafts.com/simple-paper-pinwheel-craft-1250766



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How To:

- Begin a three-month daily weather graph. Observe the weather each day and place one or more appropriate stickers on a bar graph. The bars could be labelled sunny, cloudy, rainy, snowy, windy, and calm. Place as many stickers as appropriate. You could also make a line graph that shows the outdoor temperature, taken at the same time each day. Discuss the impact the weather has on the way we dress, the time we spend outdoors, and the activities we do there. Discuss the impact the changing seasons have on the natural world, including plants (which might go dormant or lose leaves) and members of the animal kingdom (which might migrate or hibernate).
- 2. To augment the weather graph, make a whole weather station. Students can make "windsocks" to identify the direction of the wind. The class can make a rain gauge. If it snows, take a ruler outside to a level, undisturbed place, and measure its depth. Even more home made weather instruments can be found in the Inventors of Tomorrow post "DIY Weather Station for Kids".
- 3. Examine the fifth spread of *Windy Days* (turbine power). Discuss the fact that humans use a lot of energy to move and change things in our day-to-day lives, and that much of it is non-renewable. Discuss the use of wind power, and its current and future uses in providing power for human activities. Make pinwheels. If possible, have students make wind-powered boats (e.g. using wood scraps, with pencils for masts, held in place by plasticine, and sails cut from plastic bags or cloth). On a windy day, fill a small wading pool with water outside and allow them to test their boats' ability to be propelled by the wind.
- 4. Read the final page of *Windy Days*. Try the experiments found there.
- Learn about types of clouds, and try identifying them in the book and in the sky. Have students take photos of clouds outside on multiple days.
 Print out the photos and make a book, with each cloud type labelled.

ACTIVITY 3: ART

Collage is an art activity in which everyone can be successful.

Learning Expectations:

Students will:

- create works of art that express feelings and ideas inspired by personal experiences
- use a variety of materials, tools, and techniques to respond to design challenges (e.g., mixed media: use textured materials to create a land-scape collage that includes a horizon line)

You Will Need

- Windy Days
- collage materials
- scissors and glue
- heavy art paper

How To:

- 1. Introduce the idea of a horizon line in pictures (the line where things on the ground meet the sky).
- 2. Look through *Windy Days*, focusing on the illustrations. On each page, ask students to name some of the materials that might have been used. Make a list of these materials. Note how the illustrator, Miki Sato, has used thread or yarn, draped diagonally across a page, or placed in swirls, to suggest the direction and force of the wind. While examining the illustrations, have students identify the location of the horizon line in each one. Ask students to think about why the illustrator might have placed it where she did. Young children may not be able to answer these questions, but they can still be introduced to the idea of a horizon line.
- 3. Collect the materials listed and other materials you and the students think will be useful.



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- 4. Look through the book of windy-day photos you created in Activity #1. Using these as inspiration, have students create windy-day collages. Students may lightly draw a horizon line before adding materials.
- 5. Students may wish to make a self-portrait with wind-blown hair or scarf, cut it out, and add it to their collage. Encourage them to place their self-portrait where it makes sense in terms of perspective. The feet need to be below the horizon line (unless they are flying!). If the cut-out is quite small, they might try placing it a bit higher up on the page, close to the horizon line. If the cut-out is large, they might wish to place it low down, even hanging over the lower edge of the picture, and then trim the cut-out even with the paper. The amusement-park illustration in *Windy Days* shows a variety of sizes and placements of people.

ACTIVITY 4: MUSIC

Students are both appreciators and composers in this music activity.

Learning Expectations:

Students will:

- express initial reactions and personal responses to musical performances in a variety of ways
- create compositions for a specific purpose and a familiar audience (e.g., use rhythm instruments, body percussion, or everyday objects to create an accompaniment to a story)

You Will Need

- Windy Days
- internet
- rhythm instruments (optional)

How To:

1. Listen to a piece of music that evokes wind, such as *Into the Storm* by Robert W. Smith.

- 2. Invite students to draw what they imagine as they listen to the music.
- 3. Read *Windy Days* again. On each page, pause and invite students to consider what rhythm they might play using instruments, voices, and/ or body percussion to depict the scene in the book. Record the ideas on a chart, using pictures, words, and standard or non-standard music notation. Distribute instruments (if using) and have students "play" along while you re-read the book expressively.
- 4. Perform the composition for another class.

WINTER (SNOW DAYS)



Read this book on the first day of winter, to set the tone for celebrating the new season.

Learning Expectations:

Students will:

- identify reading comprehension strategies (e.g. activate prior knowledge, infer, predict, make connections) and use them before, during, and after reading to understand texts
- assess ways in which daily and seasonal changes have an impact on human activities, the environment, and living things in the natural environment

You Will Need

- Snow Days
- magnetic letters

How To:

Before Reading

Show the cover. Ask students what season it looks like, and what the weather might be. Read the title, author, and illustrator. Do students recognize the author, illustrator, and similar theme to *Windy Days*? Read the dedication page.



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During Reading

Read expressively, pausing for a few moments on each page to allow students to examine the illustrations closely, and to comment if they wish. On the last (wordless) page, invite students to tell what season is now beginning.

After Reading

- Invite students to share some experiences they have had in the snow.
 If your area does not experience snow, show some videos of children playing in the snow
- On another day, read through the book again, with the purpose of noticing how the season progresses from the beginning of the book to the end: first snow; snow that stays; skating on a frozen lake; the holidays; the depths of winter; a snowman melting; the first robin.
- Throughout the season, reread the book for other purposes. For example, pause before the last word on each page and have students provide the rhyming word; have a student point to the words while an adult reads; have students search for the word snow on each page.
- Have students use magnetic letters to make the high-frequency word no, then add letters in succession to change it to now (note the vowel sound change), snow (the vowel sound changes back).

ACTIVITY 1: WALK

Students can practice their powers of observation on a walk that is all about "noticing".

Learning Expectations:

Students will:

 develop early research skills by practising first-hand, direct observation of objects, living things, and phenomena

You Will Need

- an outdoor area, ideally in a natural environment
- digital camera, tablet, or phone (one, or a class set)

• printer and paper

How To:

- 1. Prime students by encouraging them to get four of their five senses ready: sight, hearing, smell, and touch (including both how the weather makes their body feel, and things they can touch with their fingers). As extra incentive, you could have hot chocolate ready upon your return, so they can exercise their fifth sense, taste.
- 2. Take students on a walk in as natural an area as possible, ideally after a snowfall.
- 3. Take many photos during the walk.
- 4. Invite students to describe the snow at this moment in time. Is it a first snow that is likely to melt? A second snow that might stay? Packing snow? Blizzard snow?
- 5. Encourage students to notice activities that are unique to snowy weather: snow plows, people shoveling, winter clothing, birdfeeders, absence of migratory birds and hibernating animals, etc.
- 6. After the walk, while still outside, invite students to make snow angels or sculptures, as conditions permit. Take more photos.
- 7. Make a book of your snowy-day photos.

ACTIVITY 2: SCIENCE ACTIVITIES

Students become hands-on scientists in this variety of fun activities.

Learning Expectations:

Students will:

- use a scientific experimentation process and associated skills to conduct investigations
- investigate liquids and solids



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 assess ways in which daily and seasonal changes have an impact on human activities, the environment, and living things in the natural environment

You Will Need

- Snow Days
- chart paper
- stickers in different shapes or colors
- internet
- for experiments related to last page of *Snow Days*: black construction paper, sandbox toys, outdoor clothing in many colors

How To:

- 1. Begin a three-month winter weather graph. Observe the weather each day and place one or more appropriate stickers on a bar graph. Create bars that represent every type of weather your area experiences in winter. Place as many stickers as appropriate each day (e.g. cloudy and freezing rain on one day, sunny and windy on another). You could also make a line graph that shows the outdoor temperature, taken at the same time each day. Discuss the impact the weather has on the way we dress, the time we spend outdoors, and the activities we do there. Discuss the impact the changing seasons have on the natural world, including plants (which might be out of sight in winter) and members of the animal kingdom (which might have migrated or hibernated).
- 2. Measure snowfall. Place a tray outside. Weigh or fasten it down. Each time it snows, have students measure the depth using a ruler. Clear the tray to get ready for the next snowfall. Letting the snow accumulate will not give an accurate measure, as the snow will compact between snow-falls. These are the instructions.
- 3. Investigate states of matter: Bring snow inside in containers. Record observations. Allow it to melt at room temperature. Record observations again. Place in the freezer until frozen. Discuss the two solid and one

liquid states of water. If developmentally appropriate, learn about the gas state, the water cycle, and how snowflakes are formed. Discuss the impact of changing states of water on human activity (e.g., snowy roads may get plowed, icy roads may get salted, we can skate and play hockey on ice, ski and toboggan on snow, swim and boat in water).

4. Read the final page of *Snow Days*. Try the experiments found there.

ACTIVITY 3: ART

Try some of the many ways to make snowflakes!

Learning Expectations:

Students will:

- create works of art that express feelings and ideas inspired by personal experiences
- use a variety of materials, tools, and techniques to respond to design challenges
- explore rotational symmetry

You Will Need

- Snow Days
- scissors and glue

How To:

 Classic fold-and-cut snowflakes can be difficult for little hands, but you can make it easier by using thin paper and by minimizing the number of folds. Pre-fold square paper into sixths as shown below





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- 2. Glue cotton swabs onto blue construction paper in a starburst pattern.
- 3. Flatten paper cupcake liners and fringe the edges by cutting along the creases. Coffee filters or circles of plain paper can be used instead.
- 4. Glue three craft sticks in an asterisk shape. Paint or glue on embellishments to decorate.
- 5. Draw a large asterisk on blue construction paper and glue on cotton balls, the contents of a hole punch reservoir, buttons, or mini marshmallows.
- 6. Stamped snowflakes: Draw a large asterisk on blue construction paper. Dip the eraser end of a pencil in thick white paint repeatedly, dabbing along the lines. Misplaced dabs will contribute to each snowflake's uniqueness. Try a variety of other stamps.
- 7. Use white glitter glue or puffy paint to draw snowflakes onto blue paper.
- 8. Decorate paper doilies.
- 9. Use painter's tape to make the shape of a large asterisk on a square sheet of heavy, white art paper. Paint the entire sheet with various colors of blue and purple paint: streaks, swirls, dabs, and splatters are all good painting techniques. Remove the tape to reveal the snowflake.

ACTIVITY 4: MUSIC

Students are both appreciators and composers in this music activity.

Learning Expectations:

Students will:

- express initial reactions and personal responses to musical performances in a variety of ways
- create compositions for a specific purpose and a familiar audience (e.g.,

use rhythm instruments, body percussion, or everyday objects to create an accompaniment to a story)

You Will Need

- Snow Days
- internet
- rhythm instruments (optional)

How To:

- 1. Listen to several pieces of winter music. (E.g., "Frosty the Snowman", "Dance of the Sugar Plum Fairy")
- 2. Invite students to use art to express what they imagine as they listen to the music. Provide a variety of materials such as play dough, paper and markers, etc. Encourage students to choose the medium that will best express their feelings about each piece.
- 3. Read Snow Days again. On each page, pause and invite students to consider what rhythm they might play using instruments, voices, and/ or body percussion to depict the scene in the book. Record the ideas on a chart, using pictures, words, and standard or non-standard music notation. Distribute instruments (if using) and have students "play" along while you re-read the book expressively.
- 4. Perform the composition for another class.

SPRING (RAINY DAYS)

THE READ-ALOUD



Read this book on the first day of spring, to set the tone for celebrating the new season.

Learning Expectations:

Students will:

• identify reading comprehension strategies (e.g. activate prior knowledge, infer, predict, make connections) and use them before, during,



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and after reading to understand texts

 assess ways in which daily and seasonal changes have an impact on human activities, the environment, and living things in the natural environment

You Will Need

- Rainy Days
- water play items
- magnetic letters

How To:

Before Reading

If possible, place water play items (e.g., a basin of water a water table with watering cans and a variety of strainers) in the science area a day or two before reading. On the day of reading, show the cover. Ask students what season it looks like, and what the weather might be. Read the title, author, and illustrator. Examine the endpapers and read the dedication page.

During Reading

Read expressively, pausing for a few moments on each page to allow students to examine the illustrations closely, and to comment if they wish. On the last page of the text ("Clearing rain...), invite students to tell what they know about rainbows.

After Reading

- Invite students to share some experiences they have had on a rainy day.
- On another day, read through the book again, with the purpose of noticing how the season progresses from the beginning of the book to the end: spring appears to arrive, with shrubs budding and bulbs blooming in the garden, but then (as often happens) spring is set back by a bout of freezing rain; later, the leaves on trees become larger and fuller, and flowers more varied.
- Throughout the season, reread the book for other purposes. For example, pause before the last word on each page and have students provide

the rhyming word; have a student point to the words while an adult reads; have students search for the word rain on each page. Return to the cover and invite them to find rain hiding in the word rainy.

• Have students use magnetic letters to make words that rhyme with rain, by adding to or changing the initial consonant. Begin by modeling adding a consonant in front of rain, to make brain, drain, grain, and train, or add two consonants to make strain. Let students practice this, then demonstrate how to swap the initial consonant to make words like gain, main, pain, chain, plain or stain. To simplify the task, provide only the letters needed to make a few simple words in each practice session. For enrichment, provide more letters and encourage students to make two-syllable words such as explain, complain, contain, remain.

ACTIVITY 1: WALK

Students can practice their powers of observation on a walk that is all about "noticing".

Learning Expectations:

Students will:

• develop early research skills by practising first-hand, direct observation of objects, living things, and phenomena

You Will Need

- an outdoor area, ideally in a natural environment
- digital camera, tablet, or phone (one, or a class set)
- printer and paper

How To:

- 1. In advance, ask caregivers to send students to school on the next rainy day equipped with boots and raincoats, ready to walk and play in the rain.
- 2. Prime students by encouraging them to get four of their five senses ready: sight, hearing, smell, and touch (including both how the weather makes their body feel, and things they can touch with their fingers).



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As extra incentive, you could have fresh mint leaves ready upon your return, so they can exercise their fifth sense, taste.

- 3. Take students on a walk in as natural an area as possible, ideally on a rainy day.
- 4. Take many photos during the walk.
- 5. Invite students to describe the rain at this moment in time. Is it sprinkling, drizzling, or pouring?
- 6. Look for signs of spring: grass sprouting, trees budding, bulbs blooming, the return of migratory birds. Take pictures of the spring signs the students notice.
- 7. Encourage students to notice places that the water accumulates. Allow them to jump in puddles.
- 8. After the walk, stay outside and make channels and dams if you have a sloping schoolyard with bare earth. make a slide show of the photos, which students can view independently on a computer or tablet.
- 9. Make a book of your rainy-day photos, or a slide show, which students can view independently on a computer or tablet.

ACTIVITY 2: SCIENCE ACTIVITIES

Students become hands-on scientists in this variety of fun activities.

Learning Expectations:

Students will:

- use a scientific experimentation process and associated skills to conduct investigations
- use an engineering design process and associated skills to design, build, and test devices
- assess ways in which daily and seasonal changes have an impact on

human activities, the environment, and living things in the natural environment

• identify properties of materials that enable the objects made from them to perform their intended function

You Will Need

- Rainy Days
- chart paper
- stickers in different shapes or colors
- internet
- for rain gauge: 2 L plastic bottle, small rocks, ruler, duct tape, permanent marker
- other specific materials for weather station instruments, listed in linked video
- for impermeability experiment: water table or basin, small stuffed toys, a variety of waterproof and non-waterproof materials, watering can, towels
- for experiments related to last page of *Rainy Days*: found objects, mud, art canvas

Links:

<u>"How to Build a Rain Gauge: 15 Steps (with Pictures)</u>", wikiHow https://www.wikihow.com/Build-a-Rain-Gauge

<u>"DIY Weather Station for Kids"</u>, Inventors of Tomorrow

https://inventorsoftomorrow.com/2018/01/22/diy-weather-station-for-kids

How To:

 Begin a new 3-month daily weather graph. Observe the weather each day and place one or more appropriate stickers on a bar graph. The bars could be labelled sunny, cloudy, rainy, snowy, windy, and calm.
 Place as many stickers as appropriate. You could also make a line graph that shows the outdoor temperature, taken at the same time each day.
 Discuss the impact the weather has on the way we dress, the time we spend outdoors, and the activities we do there. Discuss the impact the



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changing seasons have on the natural world, including plants (which might be emerging) and members of the animal kingdom (which might return from migration or hibernation).

- 2. If you created a rain gauge in the fall, get it out again, and resume measuring rainfall. If not, find instructions on wikiHow (link above). Even more homemade weather instruments can be found in the *Inventors of Tomorrow* post "DIY Weather Station for Kids."
- 3. Design and carry out an experiment to compare the impermeability of various materials. For example, suspend a sieve over a water table or basin. Students can place a small stuffed toy on the sieve, cover it with a piece of material, and pour water from a watering can over it, then examine the stuffy to see if it stayed dry. Encourage students to make predictions and then test them. Materials to compare could include cotton fabric, a piece cut from a plastic tablecloth, canvas, and gauze. Discuss the properties of the materials that would make good rain gear. Later, students could use their conclusions to design and make a rain poncho for a stuffed toy.
- 4. Read the final page of *Rainy Days*. Try the experiments found there.
- 5. Learn about types of clouds, and try identifying them in the book and in the sky. Have students take photos of clouds outside on multiple days. Print out the photos and make a book, with each cloud type labelled.

ACTIVITY 3: ART

Learning Expectations:

Students will:

- create works of art that express feelings and ideas inspired by personal experiences
- use a variety of materials, tools, and techniques to respond to design challenges (e.g., mixed media: use textured materials to create a land-scape collage that includes a horizon line)

You Will Need

- heavy art paper (dimensions around 9 x 12 inches)
- liquid watercolor paint, thin tempera paint, or food coloring
- eye droppers or drinking straws cut to about 5 inches long

How To:

- 1. Invite students to draw a picture of themselves on a rainy day, using permanent marker, crayon, or colored pencils.
- 2. Provide liquid paint in a limited range of colors (for example pink, red, purple, various blues). If you choose from the whole color wheel, the results may look muddy.
- 3. Place self-portrait on an easel, or on an inclined plane on a desk. Show students how to use an eye dropper or drinking straw to drip paint at the top of the page and watch it run down the paper. (To use a straw, dip the straw in paint, seal the top of the straw with a finger, carry it to the top of the page, and release the finger from the top of the straw.)

ACTIVITY 4: MUSIC

This age-old "make it rain" music activity is a must for any interdisciplinary study of rain. If your students are young, it might even be new for them!

Learning Expectations:

Students will:

• create compositions for a specific purpose and a familiar audience (e.g., use body percussion to create an accompaniment to a story)

You Will Need

- Rainy Days
- internet

How To:

1. Seat students in a large semi-circle, about two rows deep. Consider using chairs or having students stand to make the foot actions easier.



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- 2. Tell students they can make the sound of rain by working together. They just need to follow what you are doing when you are facing their part of the group. They will keep doing that action until you come back to their section and show them a new action. You will stand in front of the semicircle and slowly rotate so that you are facing a different portion every couple of seconds.
- 3. Begin facing the students on your right, swishing your hands together. Slowly rotate to the left. As the group joins in, it will sound like wind.
- 4. On the next pass (beginning at the right again), begin snapping your fingers. If some students cannot do this, encourage them to do the best they can. This is to sound like the distant patter of raindrops. When the first part of the group begins snapping, other will still be swishing. As you rotate around the semicircle, more and more snapping will be added so that it sounds closer and closer.
- 5. On the next pass, switch to patching (patting the legs), and finally stomping. Continue these waves of actions, doing them all again in reverse order until everyone is back to swishing. On the final pass, place your fingers on your lips, or hands on head, or some other "silent" signal.
- 6. 6. Watch a video of this activity. The choir in the link below adds lightning by flashing the lights in a dark room, and adds thunder by having half the group jump at one time, followed immediately by the other half jumping. What could your group add? "The Sound of Rain" by abbads

https://www.youtube.com/watch?v=c3LjvUzxm5E

SUMMER (SUNNY DAYS)

THE READ-ALOUD



Read this book on the first day of summer, to set the tone for celebrating the new season.

Learning Expectations:

Students will:

- identify reading comprehension strategies (e.g. activate prior knowledge, infer, predict, make connections) and use them before, during, and after reading to understand texts
- assess ways in which daily and seasonal changes have an impact on human activities, the environment, and living things in the natural environment

You Will Need

- Sunny Days
- seeds and small pots of soil
- magnetic letters

How To:

Before Reading

A few days before reading, place seeds and pots of soil at the science table for students to explore. On the day of reading, show the cover. Ask students what season it looks like, and what the weather might be. Read the title, author, and illustrator. Read the dedication page.

During Reading

Read expressively, pausing for a few moments on each page to allow students to examine the illustrations closely, and to comment if they wish. On the last page of the text ("Setting sun...), invite students to share their experiences with blowing dandelion seeds. Do they know that these are actual seeds that can grow into a new plant? See if students can explain how the structure of the seed, with attached fluff, helps ensure that a new generation of the plant will grow.

After Reading

• Invite students to share some experiences they have had on a sunny day. Many people love sunny days the best, but we need to take care. Discuss the importance of sun safety, including hats, sunglasses, sun-



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screen, staying hydrated, finding shade, and seeking shelter if the heat becomes excessive.

- On another day, look at the third, fifth, and ninth spreads, with the purpose of following the life cycle of a plant from seed, to sprout, to flowers, and back to seeds.
- Throughout the season, reread the book for other purposes. For example, pause before the last word on each page and have students provide the rhyming word; have a student point to the words while an adult reads; have students search for the word sun on each page.
- Have students use magnetic letters to make words that rhyme with sunny by changing the initial consonant. Demonstrate how to swap the initial consonant to make bunny, funny, and runny. For enrichment, introduce the idea that some words, like honey and money, rhyme with sunny, even though they have a different spelling pattern. For independent practice, have students make words that rhyme with sun.

ACTIVITY 1: WALK

Students can practice their powers of observation on a walk that is all about "noticing".

Learning Expectations:

Students will:

• develop early research skills by practising first-hand, direct observation of objects, living things, and phenomena

You Will Need

- an outdoor area, ideally in a natural environment
- digital camera, tablet, or phone (one, or a class set)
- printer and paper

How To:

1. Prime students by encouraging them to get four of their five senses ready: sight, hearing, smell, and touch (including both how the weather makes their body feel, and things they can touch with their fingers). As

extra incentive, you could have popsicles ready upon your return, so they can exercise their fifth sense, taste. Make sure everyone has a hat, sunscreen, and water bottle. These are the instructions.

- 2. Take students on a walk in as natural an area as possible, on a sunny day.
- 3. Take many photos during the walk.
- 4. Invite students to describe the sun at this moment in time. Is it high or low in the sky? How is it affecting shadows? Is it nice and warm or prick-ling hot? Are there any clouds to bring temporary relief?
- 5. Take photos of students with their shadows.
- 6. Make a book of your sunny photos.

ACTIVITY 2: SCIENCE ACTIVITIES

Students become hands-on scientists in this variety of fun activities.

Learning Expectations:

Students will:

- use a scientific experimentation process and associated skills to conduct investigations
- use an engineering design process and associated skills to design, build, and test devices
- demonstrate an understanding that energy is the ability to move or change something
- demonstrate an understanding that humans get the energy resources they need from the world around them, and that the supply of many of these resources is limited
- assess ways in which daily and seasonal changes have an impact on human activities, the environment, and living things in the natural environment



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You Will Need

- Sunny Days
- chart paper
- stickers in different shapes or colors
- internet
- for experiments related to last page of Sunny Days: bubble liquid and wands, dark construction paper, everyday objects, sidewalk chalk, stick or ruler

How To:

- Begin a new three-month daily weather graph. Observe the weather each day and place one or more appropriate stickers on a bar graph. The bars could be labelled sunny, cloudy, rainy, windy and calm. Place as many stickers as appropriate. You could also make a line graph that shows the outdoor temperature, taken at the same time each day. Discuss the impact this season's weather has on the way we dress, the time we spend outdoors, and the activities we do there. Discuss the impact the changing seasons have on the natural world, including plants and members of the animal kingdom. How do plants and animals obtain water when the weather is hot? How can we help them? (e.g., putting out a bird bath containing flat rocks to provide gentle access for small creatures.)
- 2. Examine the fourth spread of *Sunny Days* ("Bursting sun"). Discuss the fact that humans use a lot of energy to move and change things in our day-to-day lives, and that much of it is non-renewable. Discuss the use of solar energy, both in the low-tech sense of a clothesline, which reduces the use of electricity, and solar panels, which can potentially allow separation from the electricity grid, or even power it.
- 3. Outside on a sunny day, measure students' shadows at the start of the school day, at mid-day, and at the end of the day. Compare. Do experiments with shadows inside. Watch how changing the relative positions of an object and a light source changes the size and shape of the shadows.

- 4. Have students design, build and place a sundial. Learn about how these devices were used to tell the time long ago.
- 5. At the science table, fasten white card or paper to the wall to create a screen. Provide a variety of prisms and a flashlight. Challenge students to use the materials to shine a rainbow on the screen. After a week or two of experimenting, have students share what they have learned. Where is the best place to hold the prism in relation to both the screen and the light? How do you make the sharpest image? How do you make the biggest image? Do research to learn more about prisms and how they bend light to show the spectrum. Learn about rainbows and how they form in nature. Ask: "What acts as the prism when we see a rainbow in the sky?"
- 6. Read the final page of *Sunny Days*. Try the experiments found there.

ACTIVITY 3: ART

Learning Expectations:

Students will:

- create works of art that express feelings and ideas inspired by personal experiences
- use a variety of materials, tools, and techniques to respond to design challenges (e.g., mixed media: use textured materials to create a land-scape collage that includes a horizon line)

You Will Need

- Sunny Days
- heavy art paper
- watercolor paints
- a source of bright light, such as an old overhead projector
- found objects
- scissors and glue



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How To:

- 1. Using the eighth spread of *Sunny Days* ("Evening sun") as inspiration, paint heavy art paper in sunset colors.
- 2. Tape black construction paper to a wall. Set up a bright light source close to the same wall, so that it shines on the paper, and turn off the other room lights. Invite a student to hold up an object in the beam of light while another student traces the shadow using chalk. If using an overhead projector, the object can be placed right on the glass. Adjust the position of the light, the focus of the projector, and the position of the object so that the image is as sharp as possible.
- 3. Cut out the silhouettes and glue them onto the sunset painting.

ACTIVITY 4: MUSIC

Students are both appreciators and composers in this music activity.

Learning Expectations:

Students will:

 express initial reactions and personal responses to musical performances in a variety of ways

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Bibliography

http://www.edu.gov.on.ca/eng/curriculum/elementary/language18currb.pdf http://www.edu.gov.on.ca/eng/curriculum/elementary/arts18b09curr.pdf The Kindergarten Program (ontario.ca) https://www.dcp.edu.gov.on.ca/en/curriculum/science-technology (2022)

 create compositions for a specific purpose and a familiar audience (e.g., use rhythm instruments, body percussion, or everyday objects to create an accompaniment to a story)

You Will Need

- Sunny Days
- internet
- rhythm instruments and found objects

How To:

- 1. Discuss: Can you hear the sun? Can the sun be represented by music?
- 2. Listen to a piece of music inspired by the sun, such as "The Imagined Sound of Sun on Stone" by Sally Beamish. Allow students to respond.
- 3. How would students use sound to represent the sun?
- 4. Provide a variety of sound sources (e.g., instruments, found objects, and digital sound effects) and allow students to experiment with composing their own imagined sound of sun.

