



GRADE 2 SOCIAL STUDIES TOOLKIT

UNIT 5

CHANGE AND THE PHYSICAL ENVIRONMENT

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Selected original artwork courtesy Mrs. Guest's daycare.

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THEME

The theme of our toolkit is environmentalism. Specifically we explore how environmentalism is linked to “Change and The Physical Environment,” Unit 5 in the K-2 Social Studies Curriculum. This toolkit highlights the environment around us, the impact that we have on our environment and what we can do to help make a sustainable and positive impact now, and in the future.



OBJECTIVE

The objective of this toolkit is to link the Grade 2 Social Studies Unit 5 curriculum, Change and the Physical Environment, with a set of resources which will aid educators in effective delivery of the unit. Broadly the resources will relate to all the outcomes in Unit 5. However, general curriculum outcome (GCO) 2.5.4 (*Students will be expected to demonstrate an understanding of sustainable development and its importance to our future*) will be a primary focus. As developers of this toolkit we feel this GCO carries special significance considering the current environmental crisis facing future generations, thus it deserves emphasis. See Appendix B for the unit overview from the New Brunswick Social Studies curriculum.



ARTS-BASED LESSON PLAN

Lesson Title: “Help Save the Bees!”

Grade Level: Grade two

Lesson Topic: Helping bees and the community

Objectives: Students will begin to recognize the impact that people have on the environment and how we depend on it to survive. We will look these concepts in terms of bees; what they do to help us and how we can help them. The lesson plan addresses the Grade 2 learning outcomes 2.5.3: *describe how people’s interactions with the environment have changed over time*; and 2.5.4: *demonstrate an understanding of sustainable development and its importance to the future*(New Brunswick Department of Education, 2005, p. 113).

Materials:

- Paper
- Pencils and colouring materials (to colour hand print)
- Scissors and glue (to cut and paste hand print on the bee can)
- Painting materials; paint, paint brushes, water, newspaper (to paint flower)
- Small painted tin “bee cans”
- Soil, flower seeds and scoops

Procedure: In this lesson, I will:

- Begin by asking students what they know about bees (where they see them, what they’re doing, etc.)
- Discuss the role of bees in our world (pollinating flowers which help us grow fruits and vegetables, etc.)
- Read *Give Bees a Chance* by Bethany Barton.
- Discuss what we can do to help bees. The teacher will write down the ideas on the board. Some of the ideas will be planting bee-friendly flowers and flowering herbs in our gardens, keeping some weeds, not using chemicals or pesticides, buying local, raw honey, keeping water outside for the bees, not being afraid of them and telling friends and family how they can help.
- Students will be divided into groups and each given a small “bee can” (see Appendix A). The students will take turns scooping soil from a bucket into their bee can and they will each get to add a seed. The teacher will then explain that each bee can contains a different type of flower that a bee can use to pollinate. He/she will explain what the class can do to help the flower grow (give it sunlight, water it, etc.)

- The teacher will ask the students what is missing on the bee? The wings. He/she will then explain that the students will be helping to create the wings for their bee.
- They will be given materials and instructions on how to trace, cut out, and decorate their hand print to use as wings for the bee.
- Once the wings have been added to their bee can, students will be asked to close their eyes and try to envision what their flower might look like when it grows.
- Students will be given painting materials to illustrate what they think their flower will look like and how the bees will react.
- To wrap up, the teacher will ask the class what they have learned about our relationship with bees, how they are important and what we must do to try and help them.
- If time remains,

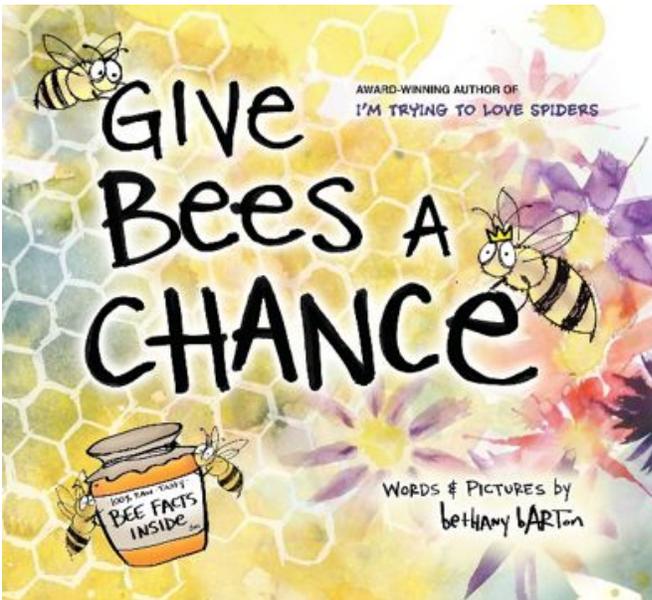
Post-Art Lesson Extension Ideas:

- Invite a special guest (a local community member) to the class who is either a beekeeper or has knowledge about apiculture. They can share with the class how important beekeeping is and how it is done.

LITERACY STUDIES

1- Give Bees A Chance

By: Bethany Barton



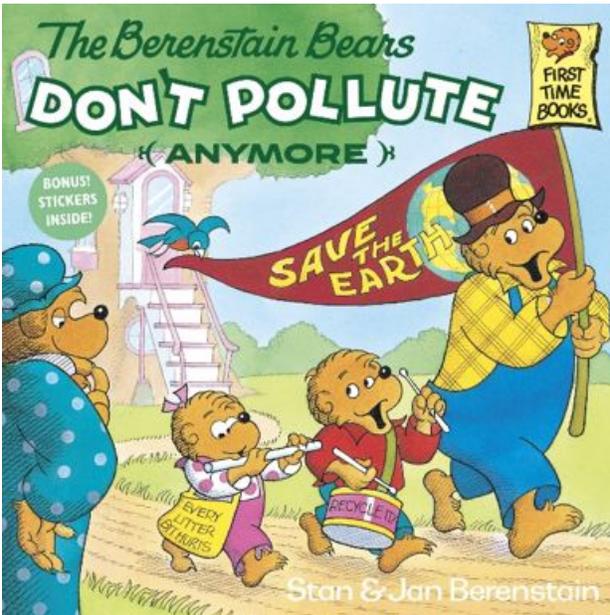
Give Bees a Chance is a story book about the important aspects of bees and their contribution to the environment beyond what many may think. Although, bees are known for making delicious honey they serve many purposes like helping plants grow fruits and vegetables. The story explains different kinds and types of bees and the anatomy of a honeybee. It teaches the reader about how honey is made and what a beekeeper wears to avoid getting stung. The overall goal of this book is to educate readers to not fear bees.

Available from Amazon.ca at:

<https://www.amazon.ca/Give-Bees-Chance-Bethany-Barton/dp/0670016942>

2 - The Berenstain Bears - Don't Pollute (Anymore)

By: Stan & Jan Berenstain



The Berenstain Bears - Don't Pollute (Anymore) is a story about the Berenstain Bear family learning about their friend, Professor Actual Factual's concern about the environment in the newspaper. The headline and write up draws the Bears attention to the trouble the Bear country is in with regards to pollution. Upon a visit with Professor Actual Factual, Brother and Sister Bear learn about the pollution that is happening around them from the factories, garbage in the lakes and the lack of trees in the forest. The Bears work together to draw awareness of the issue in their school and community. In the

end, a holiday is formed to help promote and encourage a cleaner Bear Country.

Online copy of the story available at:

<https://www.youtube.com/watch?v=N6OLW2VGY50>

See Appendix C for additional literacy resources worth consideration.

ONLINE RESOURCES

1- Connecting with the Environment

Resource

<http://www.cyh.com/HealthTopics/HealthTopicDetailsKids.aspx?p=335&np=288&id=265>
1

Explanation

This is a grade two friendly resource that focuses on our environment, primarily what it is, what we can do to preserve and help it, and how we can make less impact on the environment. The website provides tabs that can be clicked on to zone in on these specific topics, with kid friendly pictures and examples. A way this resource could be brought into a grade two classroom would be to introduce the website to the students and show them how to navigate it, then have them complete a fill in the blank sheet where the answers are to be found on the website. Using this kind of activity allows students to look deeper into the content to look for their answers, gaining a better understanding of our environment and ways to protect it.

Link to Curriculum

This resource links to 2.5.3

2 - Reduce, Reuse, Recycle

Resource

https://www.youtube.com/watch?v=USo_vH1Jz7E

Jack Johnson "The 3 R's" 0:37-1:42

Explanation

This is a fun resource for grade twos as it is a very upbeat catchy song with meaning behind it; the catchiness would help engagement. The lyrics pertain to the importance of the "number 3" relating to Reduce, Reuse, Recycle. The song gives examples of how you can do all three. This resource could be used in a grade two classroom as a prompt before an activity. As mentioned the song gives examples of how to reduce, reuse and recycle, students could listen to the song and then be asked to think of personal ways that they could reduce, reuse and recycle in their daily lives. To further on this concept,

a worker from a recycling or composting plant could come in to discuss the idea on a broader more in depth level.

Link to Curriculum

This resource links to 2.5.3

3 - How Can We Save Water?

Resource

<https://wateruseitwisely.com/kids/>

Explanation

This is a wonderful, interactive website pertaining to conserving water. The website gives 190 ways that water can be conserved, both indoor tips such as in the kitchen, and outdoor tips such as taking care of the lawn. An interesting way to use this resource in a grade two classroom would be to go over some of the ideas on the list and then have students draw a picture of one way that they could conserve water in their homes, then as a class we could go on to think of some ideas of how we could conserve water in the school. After a list of ideas is made, students could get in groups and use these ideas to make posters to put up around the school to promote ways to conserve water around the school.

Link to Curriculum

This resource links to 2.5.3

4 - Calculating Your Carbon Footprint

Resource

<http://meetthegreens.pbskids.org/features/carbon-calculator.html>

Explanation

This is a very fun, colorful and interactive website that measures carbon footprints through a questionnaire. The questions pertain to things such as transportation, food, and waste. After you answer the questions, a page comes up with goals that you can make to lessen your carbon footprint. This would be a great resource for grade twos as it makes learning about their carbon footprint fun, through the use of technology and an interactive questionnaire. The suggestions for goals to decrease your carbon footprint is

also a great addition to the questionnaire as students are required to choose a goal in order to move onto the next question of the questionnaire, so it really promotes thinking about realistic goals.

Link to Curriculum

This resource links to 2.5.3

5 - The Sounds Around Us

Resource

Sounds in nature: <https://www.youtube.com/watch?v=pPrO2jlay40>

Sounds in the city: <https://www.youtube.com/watch?v=cDWZkXjDYsc>

Explanation

Have students put themselves in a comfortable position and prepared to use their listening skills. Encourage them to try closing their eyes and focus on only using the one sense. After the noises have table groups discuss what they heard and how they were different. Travel around to the different groups and help stimulate discussion. Create a venn diagram on the board or on a piece of chart paper making points about how the noises are the same and how they are different.

Ask some prompting questions for discussion or a writing activity if desired such as:

- Why do the sounds around us change?
- What sounds do you prefer? Why?

Link to Curriculum

This resource links to 2.5.3

6 - The Earth From Above

Resource

Download Google Earth. Browse a few local areas that have exhibited change, and be familiar with operating the software. For help with viewing historic imagery visit:

<https://support.google.com/earth/answer/148094?hl=en>

Explanation

Google Earth provides historic imagery which allows us to view how landscapes have changed over time. Often this transition is from a natural landscape to a developed one. Using computer software have students explore Google Earth and attempt to find a local area that has clearly changed over time. They can use preexisting knowledge of a region to help with this. For example, if they know an area used to be farmland has recently been converted to a suburban community they could explore this area.

Have students create a writing sample which describes where they think the area is, what the purpose of the change was, and how it makes them feel to know the land has been modified.

Link to Curriculum

This resource links to 2.5.3



UNIT PROJECT

Culminating Activity - Show Me How a Plant Grows!

Purpose: To demonstrate learning of how the physical environment affects the growth of plants in a creative way.

Rationale: This activity is intended to have students display the knowledge they have accumulated throughout the course of this unit in a meaningful and creative way and links to all the GCOs in this unit. The goal is to have the students work their way up Bloom's Pyramid and have a presentation of something they created at the end for assessment. It also is meant to provide an avenue for assessment outside of traditional methods like tests or oral questioning.

Procedure

1. Engage the students' memories with pre-existing knowledge about the themes and ideas related to this unit by asking leading questions. Write all the students' ideas on the whiteboard to create a theme wall for them to use as a reference for their project.
2. Divide the students into groups of 4-5. You want to have 4 groups of students in the end. These groupings are at the teacher's discretion.
3. Ask the students what "characters" there are in the environment. The characters you are looking for are **a plant/a tree, the sun, water/rain, soil, an insect/a bee.**
4. Assign each group a season of the year (summer, fall, winter, spring) and each student in the groups one of the roles from step 3.
5. Have the students create a short skit about how the character of the plant would grow or not grow in each their given season. The teacher may assist the groups to come up with their skits but the ideas and reasoning should come from the students. Optional: provide costumes for the students in each of their roles. Ideally the students would choose or create their own costumes from materials found in the school or from a costume bin.
6. Have the students present their skits in front of the class. This gives the teacher and opportunity to assess the reasoning and production of the students.

Post-Activity

Have the students tell you whether they agreed with the skits and their outcomes based on their analysis. Ask the students how they think drought, flooding, and global warming might affect how the plant in their skits would grow.



APPENDIX A

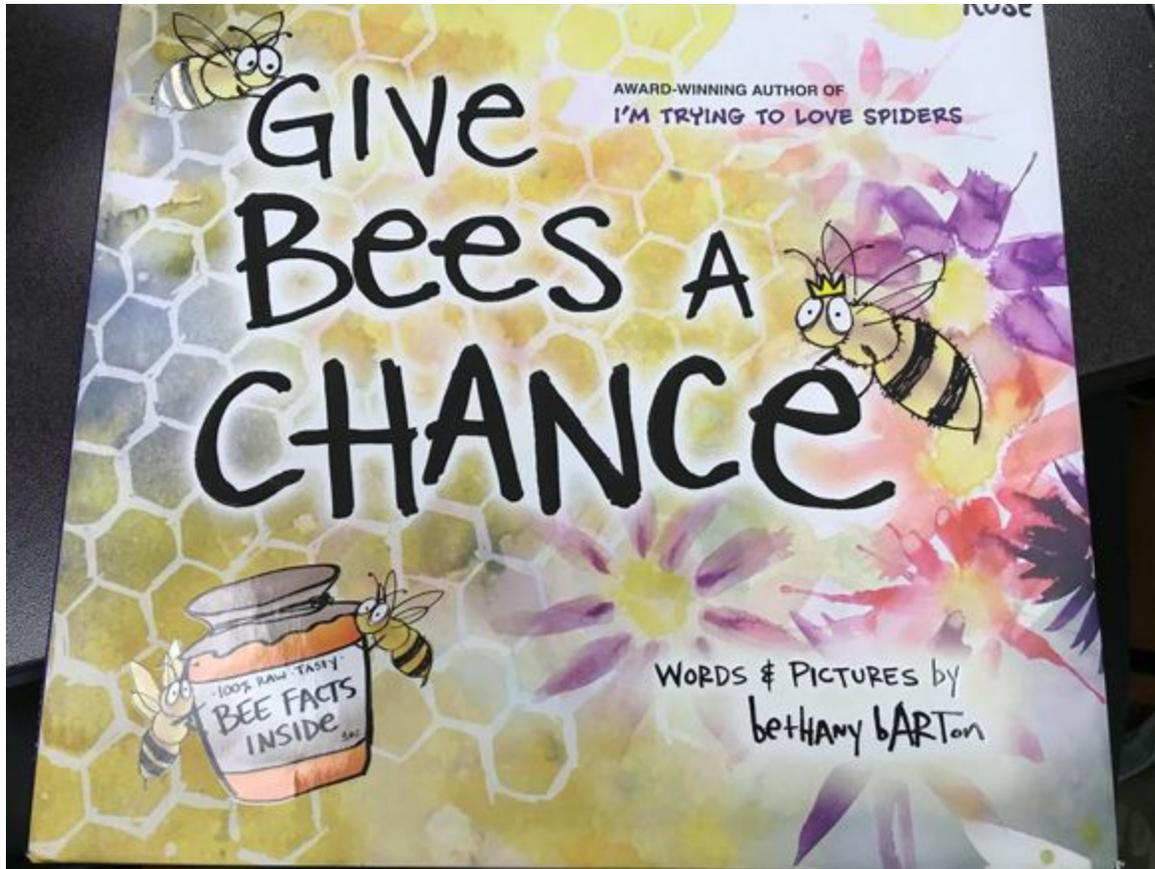
Example of bumble bee planter for each group :



**BUMBLE BEE
PLANTER**



They will add the soil and seeds to the pre-made planter can. They will trace and cut out their hand print and decorate it to add to the planter for the bee's wings. They will take care of their plant by watering it daily and giving it sunlight. Once the flowers have grown, they will be put outside to help the bees.



Give bees a Chance by Bethany Barton.

APPENDIX B

Unit Overview Grade 2

Unit 5 - Change and the Physical Environment

The unit begins with an investigation of the interaction of air and water in the environment. Students also explore how liquids and solids interact in their environment. A second major focus of the unit is the importance of conserving, protecting and sustaining healthy environments. The unit includes an examination of the historical relationship between people and the environment of the region.

Students will be expected to

- 2.5.1 describe how air and water interact in the environment and how these elements impact on people and places;*
- 2.5.2 compare properties of familiar liquids and solids and investigate how they interact;*
- 2.5.3 describe how people's interactions with the environment have changed over time; and*
- 2.5.4 demonstrate an understanding of sustainable development and its importance to the future.*

APPENDIX C

Alternative novels worth consideration

The Tree - Dana Lyons, illustrated by David Danioth

And the Good Brown Earth - Kathy Henderson

The Tree Lady - H. Joseph Hopkins, illustrated by Jill McElmurry

The Imaginary Garden - Andrew Larsen and Irene Luxbracher

