

# INSTRUCTIONS FOR USING REMOTE LEARNING PROJECTS

These materials were developed with the intention of easing the transition between in-class and temporary remote learning. Learning experiences are aligned with curricular outcomes and assessment tools have been included with each project.

## Note:

1. The teacher either sends a link to the appropriate project or sends the document itself.
2. The teacher ensures that parents/caregivers receive any required school supplies (bin with pencils, markers, paper, etc.).
3. The teacher reassures parents/caregivers that communication will be maintained between home and school.
4. The parents/caregivers may access additional resources at:
  - My Learning at Home ([www.edu.gov.mb.ca/k12/mylearning](http://www.edu.gov.mb.ca/k12/mylearning))
  - My Child in School ([www.edu.gov.mb.ca/k12/mychild/index.html](http://www.edu.gov.mb.ca/k12/mychild/index.html))

## PROJECT OVERVIEW

<b>Grade:</b>	3
<b>Main Subject:</b>	Science
<b>Big Idea:</b>	Role of the Dandelion
<b>Title:</b>	DANDELIONS: DO YOU SEE WEEDS OR WISHES?
<b>Cluster:</b>	Growth and Changes in Plants
<b>Duration:</b>	2–3 weeks
<b>Materials:</b>	dandelions, paper and pencils for drawing; box, pail, or bowl depending on experiment choice; various art and craft supplies depending on student choices; ruler
<b>Short Description:</b>	Through hands-on experiences, students will examine dandelions. Topics range from how they grow, to their usefulness, to art inspired by dandelions. Most learning activities can be completed independently. Opportunities to share learning in synchronous environments would greatly enhance this learning experience.

## LEARNING OUTCOMES

Science: [www.edu.gov.mb.ca/k12/cur/science/scicurr.html](http://www.edu.gov.mb.ca/k12/cur/science/scicurr.html)

3-1-04, 3-1-07, 3-1-08, 3-1-10, 3-1-11, 3-1-12, 3-1-14, 3-1-16, 3-1-17

3-0-1a, 3-0-2a, 3-0-2b, 3-0-3a, 3-0-3c, 3-0-5a, 3-0-5b, 3-0-5c, 3-0-5e

Mathematics: [www.edu.gov.mb.ca/k12/cur/essentials/docs/glance\\_kto9\\_math.pdf](http://www.edu.gov.mb.ca/k12/cur/essentials/docs/glance_kto9_math.pdf)

3.N.1, 3.SS.3

ELA: [www.edu.gov.mb.ca/k12/cur/ela/index.html](http://www.edu.gov.mb.ca/k12/cur/ela/index.html)

Practices: Language as Sense Making, Language as a System, Language as Power and Agency, Language as Exploration and Design

Lenses: Environmental and technological, and social, cultural, and historical

## ASSESSMENT

LANGUAGE ARTS					MATHEMATICS			SCIENCE			SOCIAL STUDIES		
COMP. Listening & Viewing	COMP. Reading	COMM. Speaking & Represent.	COMM. Writing	Critical Thinking	Knowledge and Understanding	Mental Math & Estimation	Problem Solving	Knowledge and Understanding	Scientific Inquiry Process	Design Process & Problem Solving	Knowledge and Understanding	Research and Communication	Critical Thinking and Citizenship
X	X				X			X	X				

Original concept created by: Denise Smith

## LEARNING EXPERIENCES AND ASSESSMENT

### Questions:

**How do dandelions grow and change?**

**What do dandelions need to grow?**

**What adaptations make dandelions successful?**

**How can we observe and measure dandelions?**

**How do dandelions support the environment and people?**

Teacher's instructions

### Introduction:

**Do you see dandelions as weeds or wishes?**

**Slide 1**—In a synchronous session, pose the question, “Do you see dandelions as weeds or wishes?” Have students share their ideas and their reasons why. Consider recording student responses in a Jamboard or Whiteboard or an additional slide.

**Slide 2**—Afterwards, have students independently complete the statement on this slide.

### Learning Activities:

**How do dandelions grow and change?**

**Slide 4**—Students can independently view the story and video about the life cycle of a dandelion.

**Slide 5**—Students will observe dandelions in nature. This may be done in their yard or in a park. Remind students to check with an adult before going somewhere so that they will be safe. This task can be done independently.

**What do dandelions need to grow?**

Here students will design an experiment to eliminate or reduce either the amount of sunlight or water that a dandelion receives. Consider having a synchronous session with students to discuss this experiment and to brainstorm possible methods for designing this experiment before having students choose an experiment and selecting a design to implement. Be sure to remind students to check with parents before using their chosen materials. Also, discuss with students how long they should observe their dandelion for. Consider having a follow up session so that students will be able to learn from each other about the results of both questions.

**Slide 7**—This is the launch for the experiment, students will choose which question they would like to investigate.

**Slide 8**—Students will record which question they are investigating in the top box. In the diagram section, students will draw and label a picture to show they will conduct their experiment. Be sure to get students to check with parents before using their chosen materials.

**Slide 9**—This is a space for students to record their observations.

### **What adaptations make dandelions successful?**

**Slide 11**—This slide provides a link to a script for the play called *Dandelion Defenders*. This story examines the special features of a dandelion that make it a successful plant under a lot of challenging conditions. It also touches on its role in the environment. Students will read the play and then recreate the play using materials at home. Consider reading the play together before students recreate the play on their own.

**Slide 12**—Students can independently reflect on their learning about dandelions from the play.

### **How can we observe and measure dandelions?**

In this section, students will use their counting and measuring skills to observe dandelions.

**Slide 14**—Before assigning this task, consider synchronously brainstorming parts of a dandelion that could be measured. Some examples might include the length of the leaves, the height of the dandelions, the length of the stem, or the width of the flower. Students would then select an aspect of the dandelion to measure and to use their measurements to order their samples.

**Slide 15**—Again, before assigning this task, consider synchronously brainstorming parts of a dandelion that could be counted. Some examples might include the number of yellow flower petals, the number of seeds, the number of teeth on the leaves, etc. Students would then select an aspect of the dandelion to count.

### **How do dandelions support the environment and people?**

**Slide 17**—Students will listen to a story about dandelions called *The Dandelion Seed*. While telling about the lifecycle of a dandelion it also shares how the dandelion benefits a number of other living creatures. Students would then find a dandelion or patch of dandelions to quietly observe and record the visitors that interact with the dandelion. Be sure to remind students to check with an adult before going outside.

**Slide 18**—On this slide, students will examine ways that humans can use dandelions. A variety of resources have been provided, but students may also choose an idea of their own. It is important that students check with their parents/care-giver first before trying any of these activities to ensure their safety.

### **Just for fun:**

Besides being useful, dandelions can inspire beautiful pieces of art.

**Side 20**—Students can choose one of the art activities to do or come up with one of their own. Remind students again to check with an adult before using any art or craft supplies.

### **Final Challenge:**

In this final challenge, students will have to make a decision whether or not the dandelion is a weed. As an introduction to the challenge, students will listen to the song *Dandelion* and read the article *Why Some Plants are Weeds and Others Aren't*. Students will then need to make a decision and determine a way to share their thinking. This can be done as a display, presentation, video or some other form of communication. Consider how students will share their products once completed.

**Slide 22**—This slide provides links to the texts and a description of the challenge.

**Slide 23**—This slide provides a template that can be used to create success criteria with students. It can also be used for student self-reflection and teacher feedback while working on the challenge.

**Reflection:**

To conclude this learning experience, facilitate a synchronous discussion with the following discussion questions:

- During this learning experience, what ideas made you reconsider your thinking or challenged your initial thinking?
- Why do different ideas exist about dandelions?

**Slide 25**—Students can complete the independent reflection.

Step-by-step instructions for students:

See PowerPoint Presentation.

**APPENDIX (PRINTABLE SUPPORT MATERIALS INCLUDING ASSESSMENT)**

Grade 3: Dandelions.pptx

Grade 3: Assessment Rubric.docx

## Assessment Rubric

	Essential Understanding	Limited	Basic	Good	Very Good to Excellent
Mathematics Knowledge and Understanding	Measurements and counts can be used to describe and compare dandelions.	Identifies attributes of dandelions that can be measured and/or counted.	Describes how to measure and/or count attributes of dandelions.	Uses measurements and/or counts to describe dandelions.	Compares dandelions using measurements and/or counts in a variety of ways.
Science Knowledge and Understanding	Dandelions grow and change in predictable patterns.	Identifies the parts of a dandelion.	Describes the stages of a lifecycle of a dandelion.	Experiments to determine conditions needed for plant growth.	Analyzes data to determine conditions needed for plant growth.
	Dandelions have adaptations that help them survive.	States an adaptation.	Describes an adaptation.	Infers how the adaptations helps the dandelion grow.	Defends the success of a dandelion's adaptations.
	Dandelions support the environment and people.	Names a use of dandelions.	Describes various ways that dandelions support the environment and people.	Shows how dandelions support the environment and people.	Evaluates the usefulness of dandelions to support the environment and people.
Science Scientific Inquiry Process	Measurements and counts can be used to describe and compare dandelions.	Identifies attributes of dandelions that can be measured and/or counted.	Describes how to measure and/or count attributes of dandelions.	Uses measurements and/or counts to describe dandelions.	Compares dandelions using measurements and/or counts in a variety of ways.
English Language Arts COMPREHENSION Listening and Viewing and Reading	Texts inform our ideas.	Identifies sources of information.	Describes things learned from texts.	Analyzes how texts shape or add to our knowledge.	Evaluates the effectiveness of texts to inform our ideas.