

# **Harvest Bin Project – Gardening Basics**

# How to Read a Seed Packet

Students will engage with the parts of a seed packet through interactive worksheets and presentations. This activity is designed to increase understanding of how to interpret the information presented on most seed packaging, including seed type, planting instructions, care, and harvesting. Students will conclude the lesson by creating their own imaginary seed packet correctly labelled and illustrated.

## Subject Levels/ Suggested Grade

Grade 2-3 Science

Grade 4 English Language Arts

Grade 4 Arts Education



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Grade and Subject	Curricular Competencies	Content Connections
Grade 2-3 Science	Demonstrate curiosity and sense of wonder about the world  Observe objects and events in a familiar context  Experience and interpret the local environment  Sort and classify data and information using drawing, pictograph and provided tables	<ul> <li>Similarities and differences between offspring and parent</li> <li>Biodiversity in the local environment</li> </ul>
Grade 4 English Language Arts	Access and integrate information and ideas from a variety of sources and from prior knowledge to build understanding  Use a variety of comprehension strategies before, during, and after reading, listening, or viewing to deepen understanding of text  Consider different purposes, audiences, and perspectives in exploring texts  Apply a variety of thinking skills to gain meaning from texts  Use writing and design processes to plan, develop, and create texts for a variety of purposes and audiences  Use language in creative and playful ways to develop style	<ul> <li>Sentence structure and grammar</li> <li>Text features</li> <li>Literary elements and devices</li> <li>Writing and reading processes</li> </ul>
Grade 4 Arts Education	Connect knowledge and skills from other areas of learning in planning, creating, interpreting, and analyzing works for art  Adapt learned skills, understandings, and processes for use in new contexts and for different purposes and audiences  Experience, document and present creative works in a variety of ways	visual arts:     elements of design:     line, shape, space,     texture, colour,     form; principles of     design: pattern,     repetition, balance,     contrast, emphasis,     rhythm, variety

### **Teacher Background**

In this Gardening Basics lesson, students will apply basic reading comprehension skills to the understanding of a seed packet. We have chosen to use a sample pack of cucumber seeds from West Coast Seeds Ltd, as this is a vegetable that most children will have experienced either at home or through the BC School Fruit and Vegetable Nutritional Program in their classes.

While many experienced gardeners find these seed packets easy to understand and interpret, it can be more challenging for novice gardeners or children who may be unfamiliar with the gardening terms and images. All the information that is contained on a seed packet is designed to optimize the success of growing that plant. Seed packets will differ from one distributor to another, but most seed packets offer a brief description of the plant, how to sow the seeds, when to sow the seeds, and what type of environment the seeds need to germinate and grow.

By breaking down the separate parts of a seed packet, students are able to sort through complicated information and sequence it in a way that simplifies each section. The final assessment of creating their own seed packets allows for creative freedom while demonstrating understanding of each section in relation to the document as a whole.

This lesson plan is designed to be used with the accompanying PowerPoint presentation "How to Read a Seed Package". The provided seed packet template at the end of the resource can be used as a notes page, a template for the final project, or printed off and pre-filled with information you would like your students to know prior to creating their own packets.

#### **Materials**

- How to Read a Seed Package Presentation available to download from www.bcaitc.ca/resources
- Seed packet examples the presentation shows a cucumber variety available from West Coast Seeds Ltd. We encourage you to use seed packet examples for plants you are hoping to use in the Harvest Bin Project.
- Student handouts:
  - o Copies of Blank Seed Template for practice and for final project (or blank paper)

#### **Procedure**

- 1. Hook: Ask students if they know where plants come from, directing their answer to seeds. Seeds contain all of the information needed for a plant to grow up from the soil, and come in many different shapes, colours, and sizes. Explain to students that seeds can be harvested directly from the plants, but that this is a slow process and would not always produce enough seeds for large gardens each year. Instead, most gardeners will buy seeds from a store in special seed packets, which contain all of the information about the seeds, planting instructions, and instructions for caring for the plants.
- 2. Hold up an example seed packet to show the class, and pass it around so every student can look at it. Once everyone has had a chance to look over the packet, prepare students to watch the presentation.
- 3. Show the presentation on an overhead projector or Smartboard, pausing on each slide to allow students to take notes or fill in the blank seed packet template. Note that many seed packages contain many pieces of information and often are typed in very small font. As such, you may decide to only cover some of the sections with your students, or prefill parts of the worksheet. Some alternate note taking strategies include:
  - a. Students can take notes on a separate lined piece of paper and use this information to fill in their own packets in the following activity.

- b. Students could use an empty seed package, cut in half and glued onto a separate piece of paper (or photocopies, cut out, and glued to a separate piece of paper), with labels on the side explaining the parts as shown in the PowerPoint.
- 4. When students have finished completing their worksheet template, go over the answers as a class to check for understanding of the topic.
- 5. Now that students understand the parts of a seed packet, it is time for them to create their own seeds and seed package. Pass around another blank copy of the seed packet template or a blank piece of paper for students to begin their designs. Remind them to think of all of the parts of their first seed packet and include these elements in their selfdesigned product.
- 6. Display your student's finished products around the classroom or on a bulletin board for their peers to review!

#### **Extension Activities**

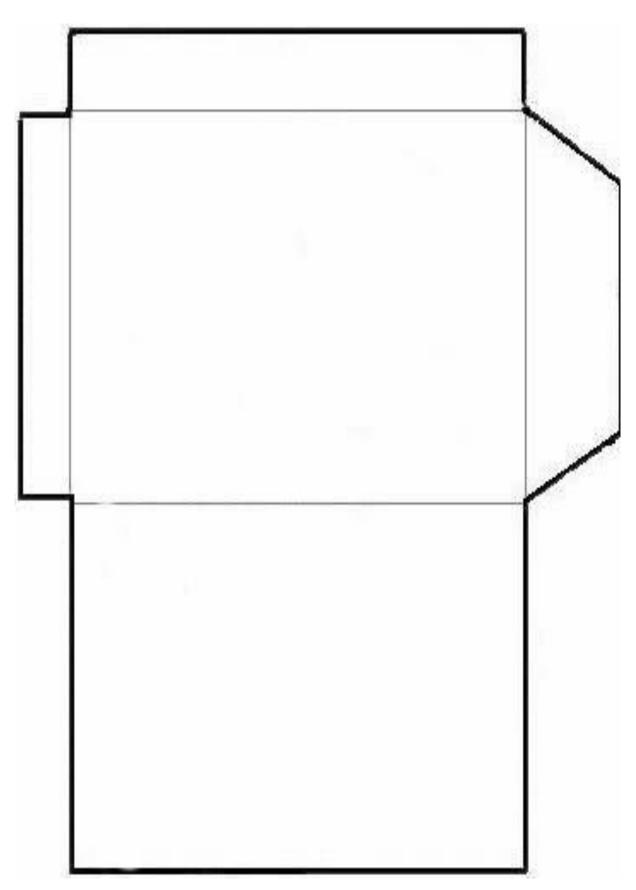
- Use this lesson with other Harvest Bin Project Gardening Basics learning activities as part of your gardening year.
- Instead of providing the class with the same seed package examples, bring in several varieties of the same vegetable from different companies to compare and contrast the information provided on the packet.
- Use this opportunity to examine different types of seeds out of the package, or have students do a seed sort activity predicting what type of seed each plant will grow into.
- Invite a gardener or garden store owner into the class for a presentation about their jobs and growing seeds.
- To extend learning, use the provided vocabulary answer key in spelling tests or as a writing word prompt sheet.

## Credit

The lessons in this Harvest Bin Project - Gardening Basics series were adapted from the activities used in the Pencil Patch Garden of Learning school visits. They are designed to be used together to help teach the fundamentals of gardening to students of all ages.

This lesson was inspired by the blog posts "How to Read a Seed Packet" <a href="https://www.veggiegardener.com/how-to-read-seed-packet/">https://www.veggiegardener.com/how-to-read-seed-packet/</a> and "Teaching How to Read a Seed Packet" <a href="https://greenschoolyard.wordpress.com/2011/06/12/teaching-how-to-read-a-seed-packet/">https://greenschoolyard.wordpress.com/2011/06/12/teaching-how-to-read-a-seed-packet/</a>.

# My Seed Packet Worksheet



# Seed Packet Vocabulary Key

Compost - a mixture of decaying leaves, vegetables, or manure that is used to improve garden soil.

Germination – the start of seed growth when the plant first pokes through the soil.

Mulch – a loose cover of decaying leaves, straw, or other organic materials placed around the base of plants to protect them or provide additional fertilizer.

Optimal - the best time to do an action; the best time to plant.

Packet - Package seeds are contained in, usually made of paper or thin cardboard.

Sow - to plant or scatter many seeds in the soil.

Transplant - starting a plant in a small container and then removing it and placing it in the garden soil when it is strong enough to grow on its own.

Variety - type of seed or plant being grown; many different types of objects in one place.