



espace
pour la
vie montréal

AGES 8 TO 10



EPISODE 1

Arriving

LESSON PLAN

1

This teaching kit was designed by the Biosphère – a museum of Espace pour la vie. It gives teachers and students an opportunity to deepen their knowledge of small-scale agriculture, the stages in a plant's life cycle, and food self-sufficiency. For ease of use, we went for a simple, user-friendly format inspired by a restaurant menu.

APPETIZER

Start by listening to the first episode of *The Amazing Earth* podcast series in class. Listen to the other episodes in sequential order for the full story.

MAIN COURSE

You can organize a fun activity outdoors (Dish 1) or indoors (Dish 2), or both.

DESSERT

Finish off with an optional activity to further explore the themes.

This project was undertaken with the financial support of:
Ce projet a été réalisé avec l'appui financier de :



Environment and
Climate Change Canada

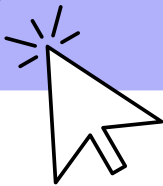
Environnement et
Changement climatique Canada

Montréal

Québec

Appetizer

Listen to Episode 1



PREPARATION TIME 15 minutes

ACTIVITY TIME 13 minutes listening time + 10 minutes discussion

RESOURCES Teacher:

Follow-up questions

The episode begins with the arrival of our three friends at the ultra-modern pavilion on Terracosti Island: Akio the former professional athlete, Paola the solitary scientist, and Billie the uniquely talented singer. The small group is greeted by Greta Tunebird, the eccentric scientist in charge of this ecological reality show.

Their first challenge: Feed themselves by their own means! Akio suggests starting a rooftop garden to be self-sufficient in food. Paola has brought seeds and shares her knowledge of beneficial associations between plants (companion planting) and pollinators. In a magical moment, Billie makes the plants grow through song, enabling the group to quickly harvest vegetables. Meanwhile, a mysterious character named Slinky prowls the island, voicing his doubts about the “Amazing Earth” project, which he describes as a conspiracy.

Dish 1

Bingo in the Garden

LEARNING OBJECTIVES

Name the essential requirements for plant growth (water, air, light, mineral salts)

Describe the role of photosynthesis

Explain how water, light, mineral salts and carbon dioxide are essential to plants

PREPARATION TIME About 15 minutes

ACTIVITY TIME 1 hour (can be divided into 2 shorter sessions)

MATERIALS White 8½ × 11 inch sheets of paper (ideally printed in colour)
A hard surface for writing
Graphite and coloured pencils

LOCATION Outdoors, schoolyard, park, alley, etc.

RESOURCES

Teacher:

Teacher's workbook

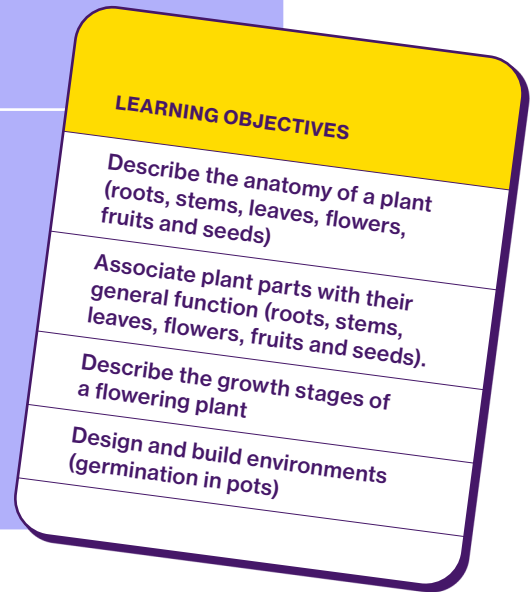
Student:

Student's workbook

Paola, Akio and Billie have taken up the challenge of starting a garden to produce their own food. To make a garden thrive, it's important to know what plants need. In this activity, you'll learn what those requirements are, the elements essential to their growth, and the characteristics of three types of garden: food, pollinator, and hybrid.

Dish 2

A Plant's Life Cycle



PREPARATION TIME About 30 minutes

ACTIVITY TIME 15 minutes a day for 5 days

MATERIALS Glass jars, ideally Mason jars
Cheesecloth or J-Cloth
Plastic containers
Germinating seeds
Water
White 8½ × 11 inch sheets of paper
Pencils
Reusable paper towels

LOCATION Indoors

RESOURCES Teacher:

Teacher's workbook

Student:

Student's workbook

For their first challenge, Paola, Akio and Billie grew a garden to feed themselves by their own means. But to grow fruits and vegetables, it's important to know all about plants, their life cycle, and the different growth stages. With this activity, you'll be familiar with these stages, with a focus on germination.

Dessert

Garden Companions

LEARNING OBJECTIVES

Describe agricultural and food technologies

Describe relationships between living organisms

PREPARATION TIME About 1 hour to read the teacher's workbook, print and cut out the cards

ACTIVITY TIME 45 minutes

MATERIALS White 8½ × 11 inch sheets of paper
Scissors

LOCATION Indoors

RESOURCES Teacher:

Teacher's workbook

Student:

Game

Grid

Our three characters have learned a lot about plant associations, also known as companion planting. Now it's your turn to choose your garden companions! Create winning teams by matching cards, and find out why these plants can be paired.