

# Achievements and Competencies

## Learning Outcomes

| Grades K-3                          |
|-------------------------------------|
| Exploring the world with our senses |
| Daily and seasonal changes          |
| Air and water in the environment    |
| Plant growth and changes            |

Achievements and Competencies are based on the Common Framework of Science Learning Outcomes (K-12) set by the Canadian Council of Ministers of Education (1997).

## Specific Expectations

### **Kindergarden**

Exploring the world with our senses

101-1 Explore how characteristics of materials may change as a result of manipulating them (e.g., initiate and describe actions that involve moving, mixing and manipulating materials. Observe and describe in general terms changes in size, shape, number and characteristics of the parts).

The students can manipulate the colour of the flower petals using food colouring and water. The flower petals will change colour by absorbing the different coloured water. Similarly, with the *Filter Flowers*, each string can be placed in a different colour of water and food colouring to create more colourful flowers.

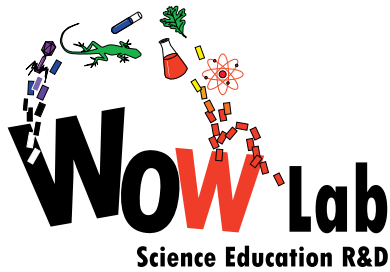
### **Grade 1**

EARTH AND SPACE SCIENCE

Daily and seasonal changes

203-2 Identify common objects and events, using terminology and language that others understand (e.g., use vocabulary such as "buds", "flowers", "seeds" and "leaves" to identify seasonal changes in plants).

The stems of the flowers are cut at an angle and placed in coloured water to create rainbow flowers. The students will use terminology and language such as "flowers", "stems", "roots" and "petals".



a WOW Lab  
**BLUEPRINT**

## Rainbow Flowers - Achievements and Competencies

### **Grade 2**

#### EARTH AND SPACE SCIENCE

##### Air and water in the environment

202-2 Place materials and objects in a sequence or in groups according to one or more attributes (e.g., classify or order materials according to how quickly they absorb water).

A variety of flowers are used when creating the rainbow flowers. The different types of flowers can be grouped together and classified according to how well they absorb the coloured water.

### **Grade 3**

#### LIFE SCIENCE

##### Plant growth and changes

100-28 Identify and describe parts of plants and their general function (e.g., compare plants in local areas and identify their similarities and differences. Describe the development and function of flowers and seeds and identify variations in their size, shape and appearance).

203-2 Identify common objects and events, using terminology and language that others understand (e.g., describe the size, shape and other features of plants and their parts).

The students will be able to describe different components of the flower and their functions by answering the following questions during the activity: How does a flower obtain water? Why aren't the flowers dyed by dipping the petals directly into the food colouring and water? Why does it look like the flowers have veins that have been dyed by the food colouring?