



## Overview

Have you ever tried to find a fox? It's not as easy as you might think! In this inquiry-based activity, students will create step-by-step instructions in a real-life maze to find those mysterious New Brunswick creatures, just like a computer-programmer.

## NB Curricular Connections

### K-2 Learning Areas

#### English Language Arts:

- *Strand:* Interactions – *Big Idea:* Exchanges - *Skill Descriptor:* Give and follow simple, one or two step directions or instructions.

#### Explore Your World:


- *Strand:* Play and Playfulness – *Big Idea:* Exploration and Problem Solving – *Skill Descriptor:* Invent approaches to practical problems.

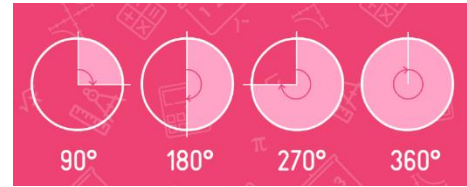
## What You'll Need

- Book - *How to Find a Fox* by: Nilah Magruder
- Find the Silver Fox Plan Sheet (photocopies per group)
- Crayons or Pencil Crayons
- Maze Cutouts (photocopies per group)
- Pencils
- Scissors

## Instructions

1. **DISCUSSION:** Have students gather together and ask the question: *Have you ever tried to find something?* Allow students to provide answers (missing sock, the last puzzle piece, a destination while driving, etc.). Then, discuss: *Was it easy or was it challenging? Why?*
2. **READ ALOUD – *How to Find a Fox*:** Before reading, ask students to share what they already know about foxes. You can find out more information about the red and silver foxes we have in New Brunswick at World Atlas - <https://www.worldatlas.com/articles/silver-fox-facts-animals-of-north-america.html>. They are known to be sneaky and not too often spotted by people. Ask: *Do we think this is going to be easy – to find a fox?* After reading, talk about if your predictions as a class were correct.

3. [MOVE THAT DIRECTION GAME:](#) Have students find a square tile to stand on and put both feet inside of it  (if your flooring does not have tiles, simply have students stand arms width apart). Play *Move That Direction* – you can call out numbers 1-5, along with forward, backward, left, and right (Ex: 3 tiles backward). Be sure to insert



TURN left or TURN right before having students move forward in that direction.

Students should always be moving forward or backward. *\*Be sure to practice each move first and stand the same way as the students so that they are not mirroring your actions but they are stepping along side of you.\** You can call out as many moves as you need to until you feel your students are comfortable with those directions. For an added challenge: time it, keep getting faster, or play last student standing [If you do the wrong direction, you sit out until 1 student remains.]

(For Grade 2 students: add angles for a challenge – see image)

4. [FIND A FOX PLAN:](#) Foxes tend to store up food in their homes and be prepared for all types of weather. The girl explorer in the story followed a lot of great advice, however, the fox was a bit tricky and hard to find! It might have helped if she would have had step-by-step instructions to the place where she knew foxes lived.

*We have discovered several silver fox dens in the Acadian Forest and it's your chance to get a photograph of these incredible animals. However, there are some obstacles in your path. In your group, you must create step-by-step instructions on how to get from your school to the Acadian Forest before the foxes leave for their usual stroll. Use your planning guide sheet to create your steps and then try it out on the classroom floor. Invite another group to test it out!*

Divide students into groups of 2-4 and read over the planning template sheet before handing them out. Students should go to their groupings with crayons/pencil crayons, pencils, and planning sheets to complete their task.

5. [FOX MAZE CHALLENGE:](#) Have groups cut out the larger maze cutouts, once they have a plan developed. Using the square tiles on the classroom floor and the cutouts, pair groups together to try out another group's step-by-step instructions FOLLOWING the instructions (with their own feet) to see if they work! Cheer all groups on and allow time for changes, if necessary. For early finishers, move some of the obstacles on the floor and start over or find another way with the obstacles that they have!

6. **WRAP-UP:** Have students reflect on the challenge and their teamwork by asking them to think and respond to the following questions: *“Were there any obstacles or challenges that you faced in finding the foxes? What would you change if you did it again? How did it feel to find the Silver Foxes with your step-by-step instructions?”*

Discuss: *“Do you know any computer programmers? A computer programmer is a person that creates step-by-step instructions for a computer so that computer programs and games work successfully. That is what we did today! A computer programmer would type them into a computer. If you have ever used a computer or played a computer game, you have only been able to do that because of a computer programmer. How must it feel to create step-by-step instructions for computers as a living?”*

### Extension Ideas

- Visit <https://code.org/hourofcode/overview> as a class and on your SmartBoard complete a few levels of a coding game, like Flappy Code or Star Wars
- Try Scratch Jr. app on classroom iPads
- Create another set of step-by-step instructions (procedural writing) for different areas of your school or classroom or activity
- For Grade 2 students, use a 100 Chart in Math to give step-by-step instructions from one number to another

### Reflection Activity

Please see the attached PDF for several choices on how you and your learners can reflect upon today’s activity.

### Global Competencies



**Collaboration**



**Communication**



**Critical  
Thinking &  
Problem-  
Solving**



**Innovation,  
Creativity &  
Entrepreneurship**



**Fostering and  
Teaching  
Self-  
Awareness  
and Self-  
Management**

### Acknowledgements





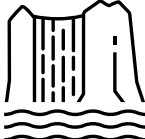
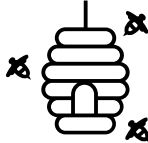
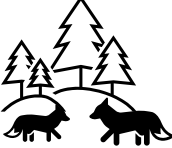
World Atlas – Silver Fox Facts: <https://www.worldatlas.com/articles/silver-fox-facts-animals-of-north-america.html>

Angles for Kids - <https://playcoolmath.com/en/math-lessons/math-for-kids/basic-geometric-shapes/angle>

# Find the Silver Fox Plan

Names: \_\_\_\_\_

Remember to use step-by-step directions like **forward**, **backward**, **left** and **right** and numbers (**1 2 3 4 5**) to get from our school to the Silver Foxes in the Acadian Forest. No diagonals! Colour your route and make sure to go around the **obstacles** in your way. Good luck!

Start  School				 Mamma Bear
		 Mountains		
 Construction Zone			 Waterfall	
	 Beehive			Silver Foxes  End

## Word Bank

- go - take - walk - step - tile - square - move - jump - turn

## Our Step-by-Step Directions

1) **Start** at our School.

2) \_\_\_\_\_

\_\_\_\_\_

3) \_\_\_\_\_

\_\_\_\_\_

4) \_\_\_\_\_

\_\_\_\_\_

5) \_\_\_\_\_

\_\_\_\_\_

6) \_\_\_\_\_

\_\_\_\_\_

7) \_\_\_\_\_

\_\_\_\_\_

8) \_\_\_\_\_


\_\_\_\_\_

9) \_\_\_\_\_

\_\_\_\_\_

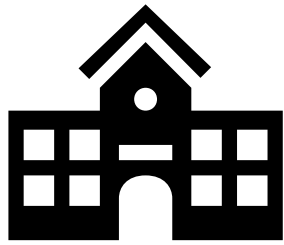
10) \_\_\_\_\_

\_\_\_\_\_

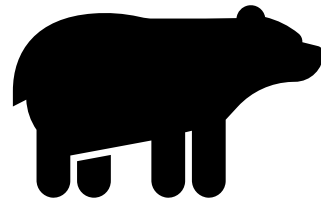
**End** at the Acadian Forest and take a photo  of the Silver

Foxes.  

## Maze Cutouts



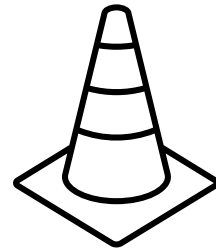
**School**



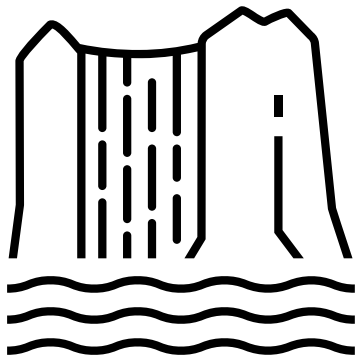
**Momma Bear**



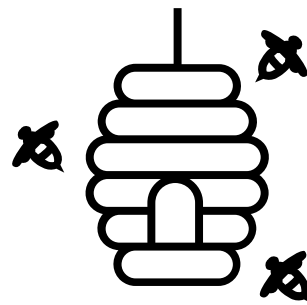
**Mountains**



**Construction Zone**



**Waterfall**



**Beehive**



**Silver Foxes**

