

Coding With Technology



Lesson Title:	Using Scratch to Make Triangles
Grade:	Grade 5
Curriculum Area(s):	Mathematics
Prior Knowledge:	Knowledge of the basic Scratch Tips activities, experience creating polygons, knowledge of screencaptures and using a word processor program

Curriculum Expectations:

Mathematics: Geometry and Spatial Sense

- identify and classify acute, right, obtuse, and straight angles
- construct triangles, using a variety of tools, given acute or right angles and side measurements

Grouping:

Individual, Partner

Assessment:

These lessons provide opportunities for teachers and students to gather evidence through teacher, peer, and self-assessments; and learning goals and success criteria. See *Growing Success: Assessment, Evaluation, and Reporting in Ontario Schools, Chapter 4* for more information.

Materials/Resources:

List of triangles
Programming Posters
Scratch desktop or mobile version <https://scratch.mit.edu/projects/editor/>
Screen capture tool
Word processor

Lesson:

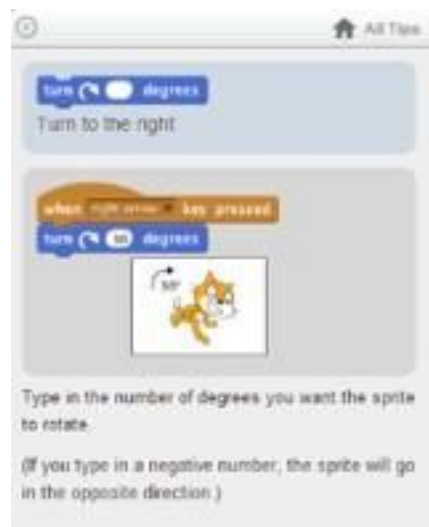
Minds on:

- Review with students how to construct angles and triangles
- On chart paper, make a list of the the triangles and angles we know how to make (e.g. acute, right angle and obtuse)
- Remind students they will be using that knowledge today



Action:

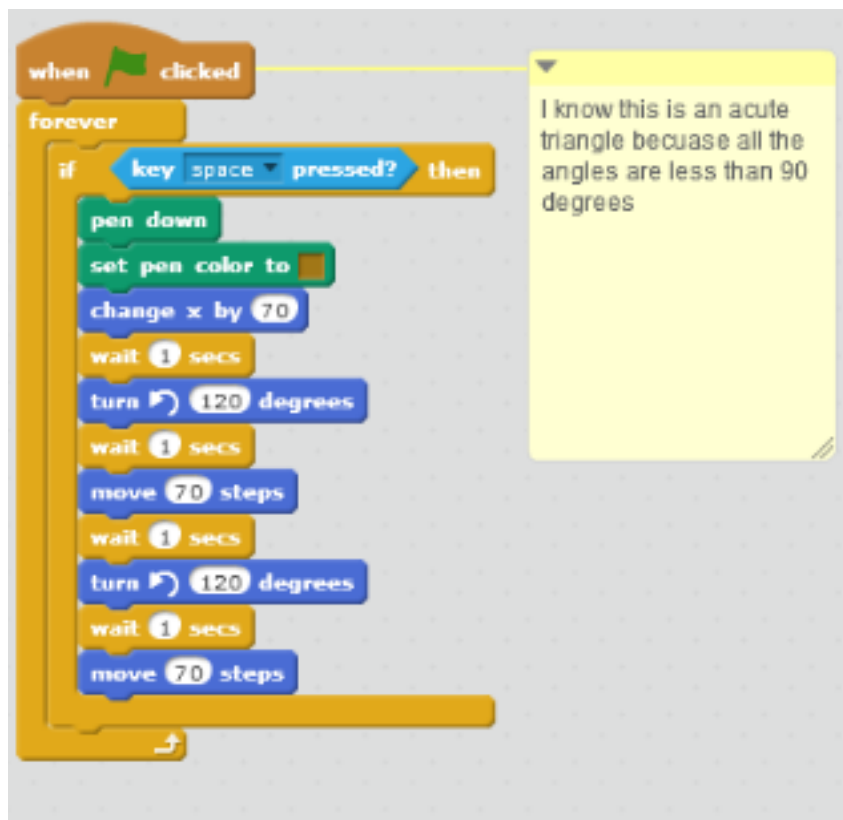
- Discuss with students that they will use Scratch to draw: a right angle triangle, acute triangle, an obtuse triangle (highlight these on the chart paper)
- Review with students how Scratch allows you to use angles



- Inform students that they should add a description to each of their scripts of code to explain how they know they have completed the task
- Students work at computers or mobile devices with Scratch
- Remind students to either save their files or take screenshots of their work and paste them into a word processor

Consolidation, Connection, and Reflection:

- The students will come back together and share how they made each shape
- Students share their script on chart paper and/or project on a large screen



Modifications:

Students could work in partners or small groups.

The students could construct one triangle at a time and then annotate their ideas.

Next Steps:

Perform the same lesson/activity and have partners present each other's creations of the shapes.

Continuing to use Scratch to reflect, translate or rotate shapes.

Extension Links

Develop a game to share the students knowledge of geometry
<https://scratch.mit.edu/projects/1952443/>