3.1 Magical Pen

Intro

Mike wants to draw some graphic codes. However, he doesn't even know how to use a pen!
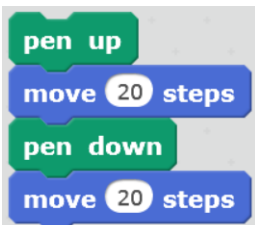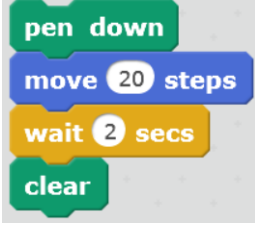
Tasks

1. Teach Mike to learn how to use the pen, adjust the pen size, and adjust the color.
2. Create a rainbow lamp-pole.

Start Learning

1. Draw Lines
Use "Pen Down" block to draw lines

Block	Explanation	Example
pen down	Start using pen	pen down / move 100 steps
pen up	Stop the pen	pen up / move 20 steps / pen down / move 20 steps
clear	Clear all drawings	pen down / move 20 steps / wait 2 secs / clear
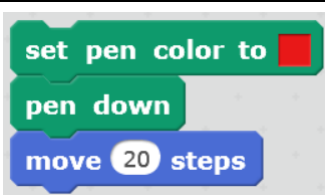
★ Practice
Draw a line with the length of 100 steps

☆ Explore
Try to draw a dotted line
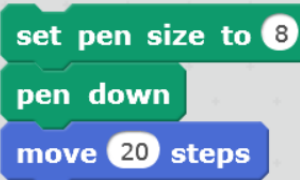
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2. Change Pen Size and Color

Block	Explanation	Example
set pen color to ■	Click the color square on this block, click on any color from the stage you want, then the pen will be set to the color you pick.	set pen color to ■ / pen down / move 20 steps

	Set the size of the pen.	
set pen size to (1)		set pen size to (8) pen down move (20) steps

★ Practice

Try to draw a line with 2 colors.
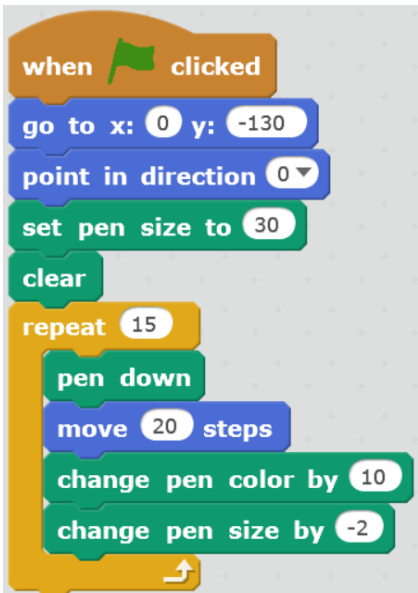
☆ Explore
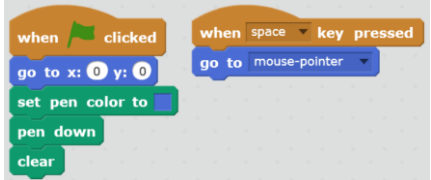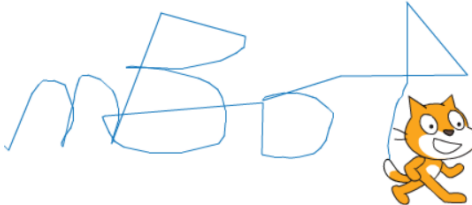
Draw a rainbow line.

Achieve

Sprite	Program	Effect

Sprite1	when 🏳 clicked
	 go to x: (0) y: (-130)
	 point in direction (0▾)
	 set pen size to (30)
	 clear
	 repeat (15)
	   pen down
	   move (20) steps
	   change pen color by (10)
	   change pen size by (-2)	

Additional Training

Sprite	Program	Effect
Sprite1	when 🏳 clicked when space ▾ key pressed go to x: (0) y: (0) go to mouse-pointer ▾ set pen color to ▢ pen down clear	

Homework

1. Use a plane as your sprite and draw a colorful path.
2. Try to find out how to use **Stamp**