Artist: Functions

Lesson time: 30 Minutes

LESSON OVERVIEW

As an introduction to functions (reuseable blocks of code), students will use functions to draw shapes on the screen and modify those functions to fit different purposes.

TEACHING SUMMARY

Getting Started

[Introduction](#)

Activity: Artist: Functions

[Artist: Functions](#)

Extended Learning

[Extension Activities](#)

LESSON OBJECTIVES

Students will:

- Use a pre-determined function to draw an image with repeated features
- Modify an existing function to draw a different shape
- Distinguish between functions and loops
- Create a program that calls a function from within a loop

GETTING STARTED

Introduction

Reflect with students on the Functional Suncatchers unplugged activity

- What functions did we use to make suncatchers?
- Why did we use functions?
- Now we're going to use functions to make drawing cool images even easier!

ACTIVITY

Artist: Functions

Some students may struggle with the difference between the function definition (the actual code of the function) and the function call (used when we tell functions to run). As a visual cue we've place the function definition inside a grey box - you can equate this to the separate sheet they used to write suncatcher functions.

EXTENDED LEARNING

Use these activities to enhance student learning. They can be used as outside of class activities or other enrichment.

Shape Machines

Ask students to write functions on paper for simple shapes, then create a list of instructions using those functions to draw a picture.