Strive

# We teach the same maths as you learn in school – but in a wildly different way

With Strive, you don't do a set of boring math problems from a workbook. Instead, you get to explore a library of coding challenges that help you to visualise maths ideas and debug your own thinking. Our lessons will give you a strong foundation in maths and coding, plus the opportunity to apply both these skills to today's real-world problems.

# What's Grade 6 maths all about?

Grade 6 is where you'll learn about algebra, linear equations, 2D and 3D geometry, and the beginnings of statistics. It's important that you master the maths concepts taught in Grade 6 - they are core concepts that form the basis of many of the advanced maths you'll study in later grades.

**We cover the syllabus**

Strive's Grade 6 Pathway covers the Common Core Mathematics Standards (CCMS) for Grade 6.

**But in a way you'll like**

We'll customise the exact projects we do according to your interests (Art? Games? Simulations? We've got it all!) and also according to your mastery of coding. We've projects for all levels – from novice to expert.

**And all done through code...**

This is maths through code - so our syllabus is divided into the main concepts you'd learn in an introductory coding course. You start with a bunch of projects (done in 15-25 lessons) that ensure you'll master programming concepts usually reserved for AP Computer Science A.

## 01 Variables

Variables keep track of quantities that change such as position, size, and color. Here's how a Geometry project (CCMS G.1 and G.3) is taught through variables:

**Create an area calculator for common shapes**

Learn more

## 02 Functions

Functions make it easy to bundle related instructions together and to map inputs to outputs. Here's how a Functions project (CCMS F.A.1 and F.B.5) is taught:

**Generate rainbows using quadratic functions**

Learn more

## 03 Logic

Boolean algebra is the logical foundation for computers, and we use it to make decisions using conditional statements. Here's how a mixed Number System + Equations project (CCMS NS.7a, NS.7b, and EE.9) is taught through conditional statements:

**Practise physical modeling - bounce a ball off the walls**

Learn more

## 04 Loops

Loops make it easy to repeat instructions according to set conditions. Here's how a mixed Geometry + Algebra project (CCMS G.3, EE.2a) is taught through loops:

**Create a beautiful, interactive chess board.**

Learn more

## 05 Objects

Many applied maths problems involve bundling data together and presenting it to users, often through text. Here's how a Functions project (CCMS IF.A.1) is taught through dictionaries and strings:

**Create an app that maps text inputs to morse code.**

Learn more

## 06 Lists

Lists enable us to keep related items in order, from high scores in a game to scientific observations. Here's how a mixed Number System + Geometry project (CCMS NS.7c, NS.7d, and G.3) is taught through lists:

**Build your own version of a modern video game**

Learn more

## 07 Classes

Classes are the blueprints for objects that bundle data together with the functions that operate on that data. Here's how a mixed Number System + Equations project (CCMS NS.7a-c, EE.6, and EE.7) is taught through classes:

**Build your own version of a retro video game**

Learn more