

## **Overview**

Rodocodo - Code Hour is a self-led activity that equips students with basic coding skills and the confidence to write code.

## **Audience**

This activity is designed for students of any attainment level. You don't need to be a maths whizz or a computer genius. You don't even need prior coding knowledge.

Rodocodo is suited for children aged between 4-11. We have split the game into two courses:

- 4-7 years-old should start with Part 1.
- 8-11 years-old should start with Part 2.

## Preparation

As this is a self-led activity, not much preparation is required. Simply make sure each student can access the game.

- If using a computer, you can play online.
- If using a tablet, download the app through the App Store/Google Play Store.

We recommend going through and completing the tutorial yourself beforehand, but it's not necessary.

## **Key Vocabulary**

- Sequencing creating a set of actions performed in the correct order to achieve something.
- **Debugging** the process of correcting errors or 'bugs' in code.
- Loops a sequence of instructions that are repeated until a certain condition is reached.





• Functions - a section of a program that performs a specific task that can be used multiple times.

## Lesson Plan

#### Introduce the activity (5 minutes)

Kick off your Hour of Code by inspiring students and discussing how computer science impacts every part of our lives.

It's okay if both you and your students are brand new to computer science. Here are some ideas to introduce your Hour of Code activity:

- Explain ways technology impacts our lives, with examples both boys and girls will care about (Talk about saving lives, helping people, connecting people, etc.).
  - 3D printing is being used to create limbs for amputees; microchips to find lost 0 pets; Skyping relatives who are far away to keep in touch.
- Explain that learning computer science is more than learning to code in a computer language, it's about learning how computers and software are changing everything in our world.
  - Digital animation in movies like Inside Out, Shaun the Sheep, or Star Wars; recording music with GarageBand on your computer, mobile banking.
- Let students know that it's important to learn more about how technology works regardless of what career they want to go into.
  - Farming (using data for watering and fertilizing), fashion (programmable LED 0 dresses), medicine (using robots for surgery)
- As a class, list things that use code in everyday life, or a list of careers that require knowledge of coding or computers.

#### Direct students to the activity

- Write the tutorial link(s) you've chosen on a whiteboard.
- Tell students to visit the URL and start the tutorial.
- **Tip:** For younger students, load the tutorial page ahead of time or save it as a bookmark.

#### Activity (50 minutes)

• This activity includes five sections, each introducing a new coding concept.



# Rodocodo - Code Hour | Teaching Guide



- At the beginning of each section there is one tutorial level followed by four other levels. During the tutorial level, students will be shown a video that introduces the coding concept and explains how to play the game. You can do the tutorial level together as a class and then allow them to work at their own pace after.
- In order to complete a level, your students must collect all the coins and get the character to the finish tile. They must complete the current level to unlock the next level.
- Students can be awarded up to three stars after completing a level. In order to gain all three stars, they must complete the level using the fewest number of commands.
- If your students are struggling, sit and work it out together. Remind them that it is okay to find the activity difficult.
- If your students finish early, you should encourage them to help their peers. Or, they could complete one of the activities from the <u>Beyond One Hour</u> section below.

#### Debrief & Close (5 minutes)

- Debrief the activity.
- Celebrate and pass out certificates.
- Time permitting, challenge your students to reflect on the day's activities by completing an <u>Exit Ticket</u>.
- Share photos and videos of your Hour of Code event on social media. Use #HourOfCode and @codeorg so we can highlight your success, too!

## **Beyond One Hour**

Enjoying Rodocodo - Code Hour? Then why stop there! There are many ways to go Beyond an Hour of Code:

- Start confidently teaching your class to code with the <u>full version</u> of our popular kids coding game, designed specially for schools!
- Access <u>Free Teaching Resources</u> and <u>Unplugged Coding Activities</u> to continue the learning!

