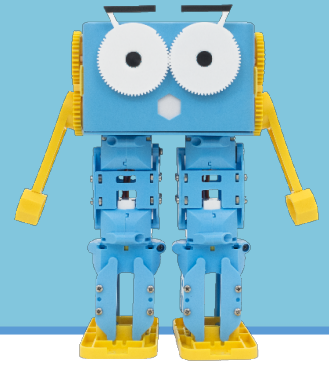# Egg & Spoon Race

Education Level: Second Level (Age 7-11)
Lesson Duration: 45 minutes

Prerequisite Knowledge: Lessons 1.1-1.4 & 1.13
Device Compatibility: Laptop, PC or Tablet

Lesson Overview

In small groups, students will compete in a traditional egg and spoon race but instead of taking part in the race – they will be coaching their team Marty to win the race! Students will need to program Marty to walk and consider the different speeds he can walk at. They will also need to think about attaching a spoon to Marty and what the best way is to balance an egg on that spoon whilst Marty is walking.

Learning Objectives

- Program Marty how to move
- Consider the balance of speed and falling over
- Think about materials for egg and spoons and the best practice to attach these to Marty

Key Vocabulary

- Balance
- Walking
- Speed
- Materials

Resources & Equipment

- Marty the Robot
- Laptops/Computers/Tablets
- Access to either Scratch or Python editors
- Plastic spoons
- Materials to make an egg (see below for more info!)

Additional Reading

- Educator's Guide
- Introduction to Programming with Marty using Scratch/Python (depending on which language is being used in the lesson)

Learning Plan & Activities

1. Split the class up into small groups so that each group has one Marty and one programming device
2. Each group should also get a plastic spoon and something to represent an egg (this could be rolled up paper, polystyrene eggs, small chocolate eggs, plastic eggs, …)
3. Students should program Marty to walk without using the built in walk commands/blocks. If you are unsure how to do this, please look at lesson 1.13
4. After attaching the spoon and placing the egg on top, students should test out the different speeds they can walk at whilst not dropping the egg – give students 10 minutes to test and prepare
5. Race time! Line your Martys up and get ready to race – the winner is the first one to cross the finish line with the egg still on the spoon!
6. Ask students to reflect on the race – what didn't work? What would they do differently next time?

Additional Challenges

- Experiment with different materials to be used for the spoon and egg – does it get easier? Harder? Does Marty have to slow down more?

Curriculum Benchmarks

Curriculum for Excellence – Technologies Benchmark Guide

● = Fully Addresses Benchmark   ○ = Partially Addresses Benchmark

Curriculum Organiser	Benchmark Covered	Egg & Spoon Race
Digital Literacy	TCH 0-01a	●
Technological Developments in Society and Business	TCH 0-05a	●
Craft, Design, Engineering and Graphics	TCH 0-09a	●
	TCH 1-09a	●
	TCH 1-10a	○
	TCH 2-10a	○
	TCH 0-11a	●
	TCH 2-12a	○
Computing Science	TCH 0-13a	●
	TCH 1-13a	●
	TCH 2-13a	●
	TCH 3-13b	○
	TCH 0-14a	●
	TCH 0-14b	●
	TCH 1-14a	●
	TCH 1-14b	○
	TCH 2-14a	●
	TCH 0-15a	●
	TCH 1-15a	●
	TCH 2-15a	○

National Curriculum – Computing, Design & Technology

● = Fully Addresses Benchmark   ○ = Partially Addresses Benchmark

Curriculum Organiser	Benchmark Covered	Egg & Spoon Race
Computing	1-a	●
	1-b	●
	1-c	●
	2-a	●
	2-b	●
	2-c	●
	3-a	●
	3-b	○
	4-a	○
	4-b	○
	1.1-b	●
	1.3-b	●
	2.2-a	●

	2.3-a	●
	2.3-a	●
	3.1-b	●
	3.3-c	●

Australian F-10 Curriculum – Digital Technologies, Design & Technologies

● = Fully Addresses Benchmark   ○ = Partially Addresses Benchmark

Curriculum Organiser	Benchmark Covered	Egg & Spoon Race
Digital Technologies	ACTDIK001	●
	ACTDIK002	●
	ACTDIP003	○
	ACTDIP004	●
	ACTDIP010	●
	ACTDIP011	○
	ACTDIP013	●
Design & Technologies	ACTDEK001	○
	ACTDEK002	○
	ACTDEK004	○
	ACTDEP007	●
	ACTDEP009	●