

LESSON 11

Score, win and share, Part 3

40 minutes

Strand 1: Introducing computer science

Built in MakeCode Arcade

Outcome 1.8

Outcome 1.9

WHAT THIS LESSON DOES

Students finish Monkey Mayhem in MakeCode Arcade with collecting, scoring and a 30-second win condition, then test the game against their plan and evaluate one change they made.

CURRICULUM OUTCOMES

Outcome	What the specification asks for
1.8	test the code to determine its functionality and to identify and manage errors
1.9	evaluate the results in groups of two or three and discuss how the code worked and potential modifications to help improve it

WHAT STUDENTS SHOULD BE ABLE TO DO

- Finish a game with collecting, scoring and a win condition, and test it against the plan you wrote (LO 1.8)
- Evaluate your game and explain one change you made (LO 1.9)

BEFORE THE BELL

- Devices ready, students logged in, and MakeCode Arcade open in the browser (arcade.makecode.com).
- Students should open the project they saved earlier if they have one; otherwise they can start a new Arcade project named for this game.
- The four parts students test the finished game against are on the second step of this lesson: a monkey you move, donuts in random places, a score that rises on collect, and a 30-second countdown that ends the game. If your class wrote their own plan in an earlier lesson, ask them to have it beside them as well.
- Optional: pin a short share rota so pairs can swap devices near the end to play each other's games.

WHAT YOU NEED

Item	Qty	Per	If you do not have it
tablet or laptop with MakeCode Arcade	1	pair	run the lesson on the IWB with students taking turns

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HOW THE LESSON RUNS

4 min	introduction	Start: what we're building
2 min	content	The plan: four parts to build
2 min	content	Create a new project
3 min	content	Add your player
3 min	content	Move your player
3 min	content	Create the donuts
4 min	content	Random places
3 min	content	Collect the donuts
2 min	content	Get a point
2 min	content	Play a sound
3 min	content	Add a countdown
3 min	content	Wrap Up
3 min	content	Make sense: what worked, what broke
2 min	content	Reflect
1 min	summary	What you covered

TEACHING MOVES

- Model the overlap block on the board once: Player with Food, destroy otherSprite , then score and sound inside the same handler.
- Keep a steady run-and-fix rhythm after each add so bugs stay small before the next block goes in.
- When the countdown is in, ask pairs to play a full 30-second round and check the three things they planned for: collecting, scoring and the game ending.
- Leave two minutes for device swaps so classmates can play each other's finished games.

WHAT TO WATCH FOR

- Destroying the player instead of the food: the destroy block must use otherSprite , not the player sprite.
- Food kind not set: new donuts must be SpriteKind.Food or overlap and scoring never run.
- Score or sound left outside the overlap handler: both need to sit inside the same onOverlap so they fire on each collect.

DIFFERENTIATION

- Support: Sit with pairs on the overlap step only; check Food kind and otherSprite before they add score or sound.
- Extension: Change the countdown length, donut spawn rate, or add a second collectible once the base game does all four parts.
- Extension: Ask for one clear sentence on what they would add with more time, ready for the reflect discussion.