

Lesson 4: Kodu Konundrum

Duration: One hour

Standards:

- Construct a set of statements to be acted out to accomplish a simple task (e.g., turtle instructions).
(CSTA L1:3.CPP.4)
- Implement problem solutions using a block-based visual programming language.
(CSTA L1:6.CPP.6)

Objectives: Kids will be able to...

- Add tiles to a When... section to differentiate behavior based on an object's characteristics.

Lesson Sequence:

Activator: Sing “Mary had a Little Kodu” (10 minutes)

Explore: Kodu eats all apples (20 minutes)

- Open up the world from Lesson 3.
- Ask: “What happens if we make one apple green?”
- Select the object tool.
- Tell kids to change one apple’s color to green.
- If kids need help: Lead kids through clicking on an apple and changing the color.
- Press the play button. Kids should observe that Kodu still eats all of the apples, whether they are red or green.

Discussion: Kodu eats all of the apples (10 minutes)

- Refer to the lyrics in “Mary had a Little Kodu”
- Ask: “Did Kodu only eat the red apples when we pressed play?”
- Discuss: “How can we tell Kodu to only eat red apples and not the green ones?”

Koloring Kodu's World (10 minutes)

- Kids should color the Kodu world and make one of the apples green using the Koloring Kodu World handout.

Koding Kodu (10 minutes)

- Lead kids through the process of programming Kodu to only eat red apples.
 - Click on the plus sign in the **When** section.
 - Click on **colors**.
 - Click on **red**.
 - Press play.

Warning!

Kodu will stop when it encounters its first green apple. This is because it did not eat it and the apple did not disappear. Kodu is still executing its first command, which is to move towards an apple.

You can make the Kodu continue on by including the following line of kode:

WHEN bump apple green DO vanish it

*Find vanish in the combat group of tiles.



Image: Specifying the Color