

G4 Edison LEGO

Teacher's Answers

Unit 1

Activity 1

Clockwise: R2D2, WALL-E, Optimus Prime

Activity 2

Cleaning robot, industrial robot, space exploration robot

Activity 3

Clockwise: Sound sensor, Light sensor, Infrared (IR) sensor

Activity 4

Motor(Actuator), LEDs, Speakers

Activity 5

Dual drive – used to drive both wheels simultaneously

Detect Obstacle – helps Edison discover obstacles at the sides and/or the front

Flash LED – lights Edison's left and/or right LEDs

Event Wait – allows user to input the duration of each function

Loop – keeps repeating the process again and again

Activity 6

Left LED flashes

Activity 7

Single drive only drives the left or the right wheel of Edison. Dual Drive drives both the wheels simultaneously.

Project



Unit 2

Activity 1

YES, NO, YES

Activity 2

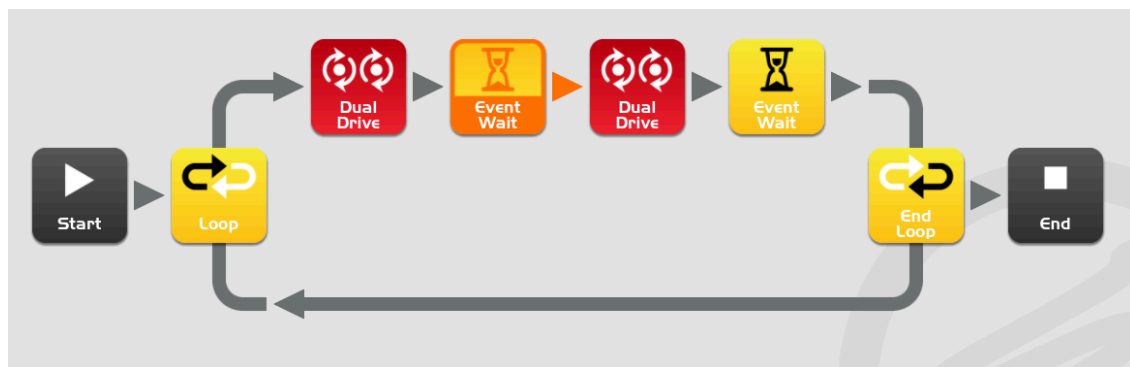
Edison avoids obstacles

Activity 3

Pick up small objects, like LEGO pieces, lying around.

Activity 4

Loop, Event Wait, Dual Drive



Unit 3

Activity 1

Left; Right;

Because it takes less time

Activity 2

The day on which you were travelling;

1. Left road 2. Right road

Activity 3

Nothing happens;

Edison starts beeping

Activity 4

5th block clockwise; Remote Control

Activity 5

2nd row Left to right: Remote Control, IF, Event Wait

Bottom row: Dual Drive

Blanks in text

Forward Right

Back Right