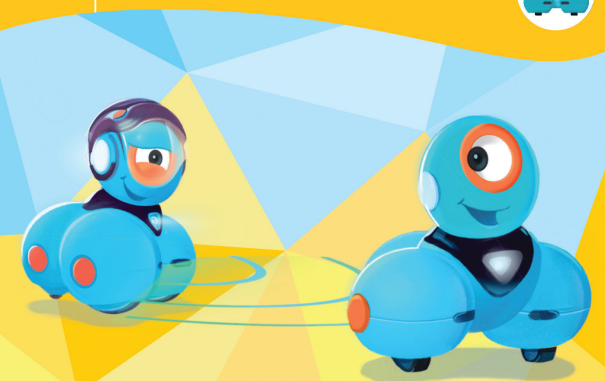


Up for a Challenge?

Follow the Leader!

4.4 Conditionals



Follow the Leader

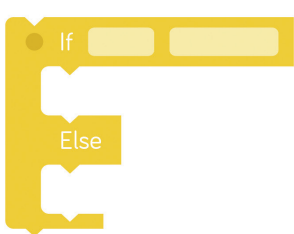
Dash wants to play Follow the Leader.
Lead the way, Dash!

w:onder
workshop


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4.4 Conditionals


1. Dash wants you to follow! Add an **If/Else** block.



2. **If** Dash senses you are following, Dash will **drive 50 cm forward** really fast.



3. **If** Dash **does not** sense you following, Dash will **wait** until you get closer.



4. Put your entire program in a **Repeat Forever** block.

BONUS Have Dash make **turns** and **spins** for you to follow.

MATERIALS:

- Dash robot
- Blockly app
- Dash Challenge Card

STEPS:

1. Use the "Follow the Leader" Dash Challenge Card to create a sequence of commands for Dash.
2. Open Blockly on your [compatible device](http://www.makewonder.com/compatibility) (www.makewonder.com/compatibility) and create a new program.
3. Follow the instructions on the Challenge Card by dragging the block commands onto your screen. Connect them in order below the START block.
4. Press the green PLAY button to test your program.

Now Let's Get Creative!

Use your coding skills to create a fashion show for Dash!

Dress up Dash in the finest robot fashions and program a runway walk. Use craft materials or LEGOs to outfit your robot. Then use the Path, Blockly, or Wonder to program Dash to move down the runway and back. Be sure to add a little style and attitude to your model's walk!

STEPS:

1. Create a "runway stage" with painter's tape or blocks.
2. Create costumes for Dash using a variety of craft materials.
3. Program your Dash using Path, Blockly, or the Wonder app to show off their costume with a creative runway walk.
4. Make sure to add lots of turns, and maybe even a little dance animation or two. Want more flair? Add some lights and sound! Show off your robot's personality.
5. Use a clap, voice command, or other event to run your program.

LEVEL UP!

Create a uniquely shaped runway, maybe in the shape of a "T," a "U," or a "+" sign. Use blocks or small cardboard boxes to "fence

in" the runway. Use the "IF" programming blocks (you may need more than one) to program your robot to sense the runway's end and then keep turning until it has a clear runway path again.



MATERIALS:

- Dash robot
- Path, Blockly, or Wonder app
- Crafting materials: fabric scraps, construction/scrapbook paper, pipe cleaners, pom poms, stickers, etc.
- Scissors, (double-sided) tape and/or stapler
- Building Brick Connectors and LEGOs
- Painter's tape or cardboard/wooden blocks to outline the runway

Vocabulary

Conditionals: Statements that only run under certain conditions.

Time to Go Offline!

Want to unplug for a while? Dash and Cue are ready to strut their stuff on the runway! Put on your creative cap to design some show-stopping outfits for Dash. Design six different outfits for your robot. Need some inspiration?



Imagine Dash is going to an event on the moon; what should Dash wear? Or a ride into the Wild West? No problem! You can design the perfect adventure ensemble. And don't forget the accessories! Robots love hats and bags! Use markers, crayons, or colored pencils to design outfits for Dash, found on **page 4**.



SUMMER READING:



Take a look at our blog's Summer STEAM Reading List. How many books have you read this summer that have to do with coding or robotics?

<http://bit.ly/STEAMreading>

COLOR IN OUR ROBOT'S EYE TO SHOW HOW MANY BOOKS YOU'VE READ SO FAR:



FUN FACT:

The size of the smallest robot is less than 1/1000th part of a millimeter. It is called nanobot.

Design Time!

Use the following templates to create a new look for Dash. Feel free to make multiple copies of these blank outlines to design even more. Use markers, crayons, or colored pencils to create your designs, and then cut out the outfits and use tape to attach the outfits to your robots.

