

A Series of Unfortunate Events!

Senses and Events



Part 1: Senses

Senses and Events



Our senses pick up events that happen around us.

But how does our body go from sensing an event to reacting to it?



Step 1: Sensing the Event

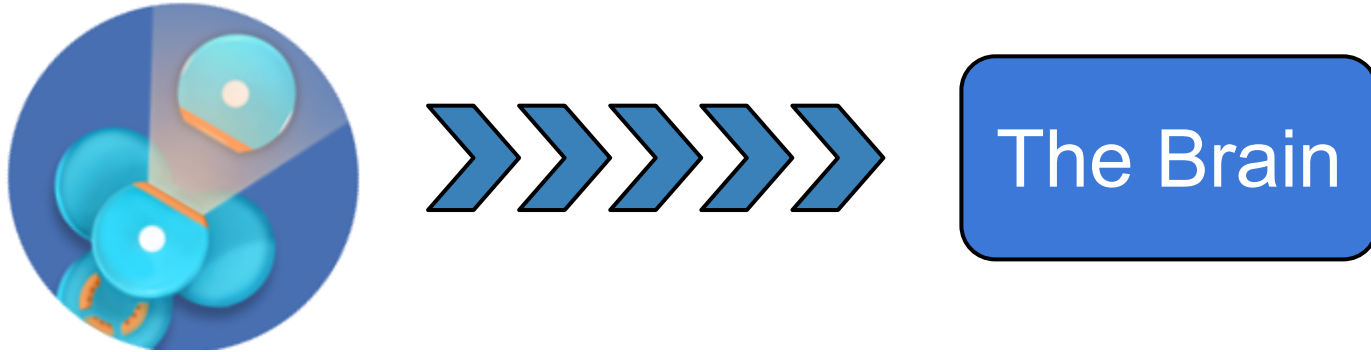


First, one or more of your senses picks up information:

- Something smells funny...
- Look, a cat!
- I'm upside down?!

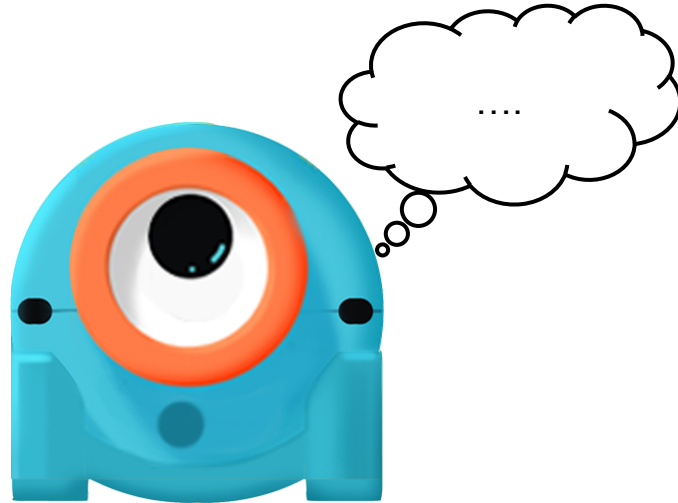
Step 2: Sending the information

Next, the information is passed from that sensory organ (like your eyes) to your brain along your body's communication lines: **nerves**.



Step 3: Processing the Information

Now it's up to your brain. Your brain takes the information from all of your senses and figures out what to do.



Step 4: Taking Action

When your brain figures out what action to take, it then passes instructions along the nerves to the parts of your body that need to know.



The Brain



Part 2: Event Handling With Dash and Dot



Events and Events Handlers

In programming, there are **events** and **event handlers**.

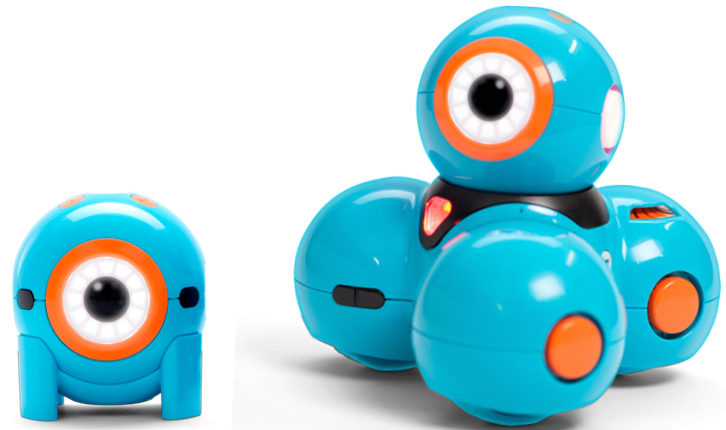
Events are things that happen outside of the program.

Event handlers tell the program how to respond to each event.



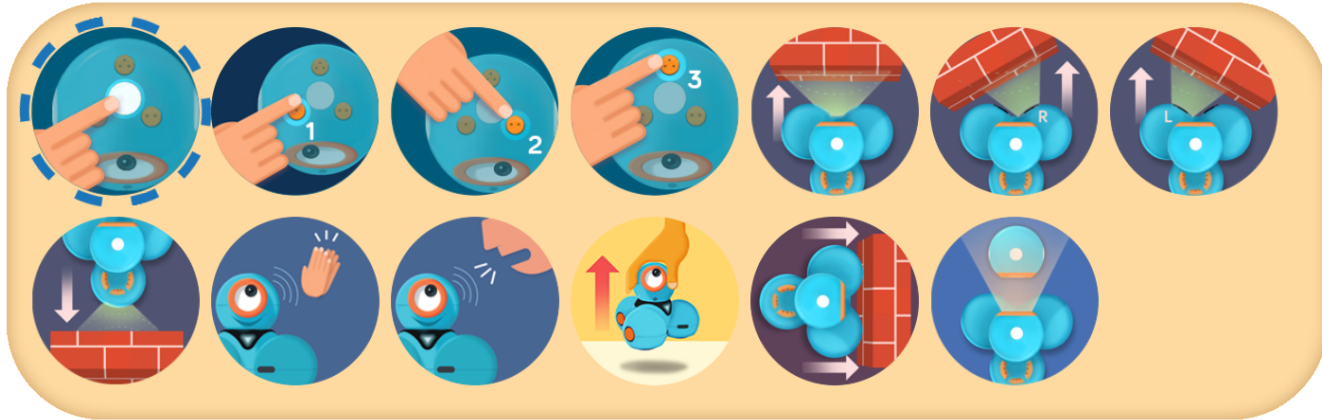
Robots and Events

Robots have “senses” too: they are called **sensors**.
Can you think of different things that Dash and Dot can sense?



Robots and Events

We write programs to be the brains of robots. Robots can only respond to events that you program them to respond to.



Programming Dash and Dot

We can use event handlers in Blockly in two places:

- **Start Blocks:** these control when Dash or Dot start a program.
- **Control Blocks:** these control whether Dash or Dot does something, for how long it continues, and how many times it repeats an action.
- Let's make Dash dance!

