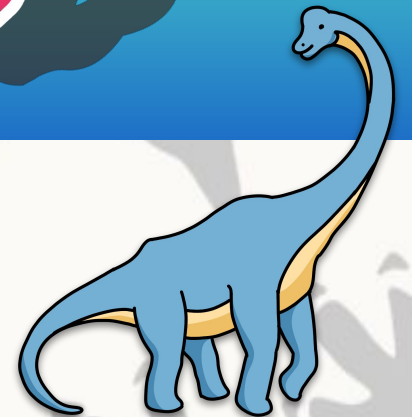


Play Code Learn

DINOSAUR LOOPS

Lesson One: Inputs and Outputs



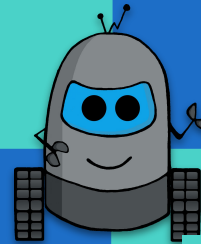
Lesson One Learning Outcomes

Learning Intention:

...to understand
inputs and outputs in
computing.

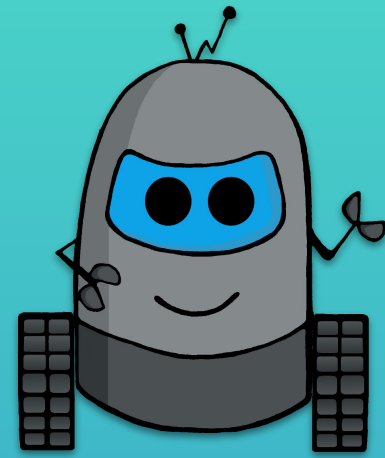
To explore
types of
digital
hardware.

To learn the
terms inputs
and outputs.



To learn the
concepts of
computational
thinking.

To understand
how
computational
thinking can
help us.

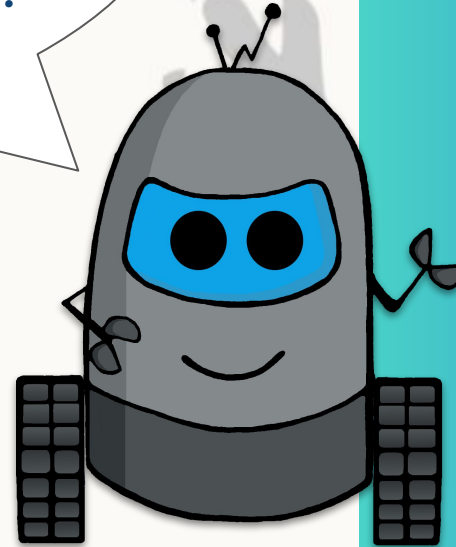


Concepts of Computational Thinking

Discussion: Computational Thinking

What is computational thinking?

What do you think this means?



Discussion: Computational Thinking

So, what is computational thinking?

It's not thinking like a computer,
as computers **do not** and **cannot** think!

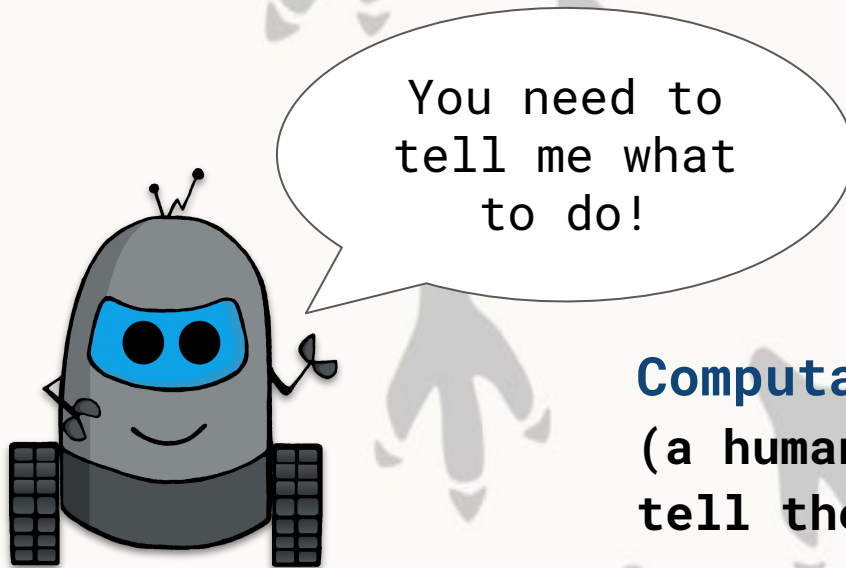


Thinking computationally is not programming either...

Programming tells a computer what to do and how to do it.

Discussion: Computational Thinking

Computational thinking is a thought process.



Computational thinking enables you (a human) to work out exactly what to tell the computer to do.

A computer or digital device *will only* follow the instructions it has been given.

What is computational thinking?

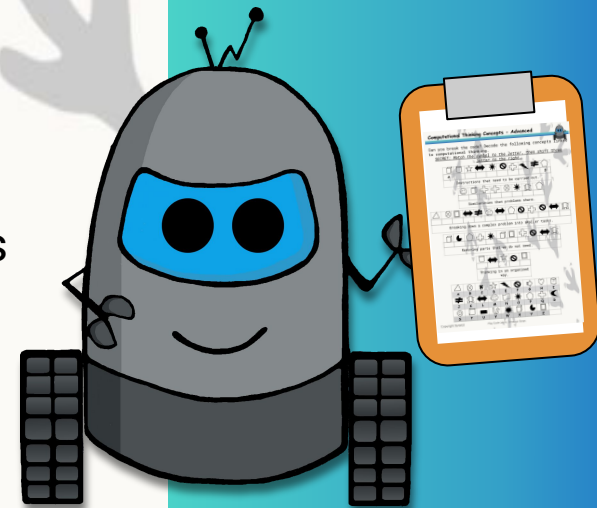
Activity: Computational thinking concepts

								
A	B	C	D	E	F	G	H	I
								
J	K	L	M	N	O	P	Q	R
								
S	T	U	V	W	X	Y	Z	

Can you break the code?

Use the symbol cipher to decode the clues to give you the names of different concepts that we use in computational thinking!

*Did you know this is part of **encryption** in computer science?*



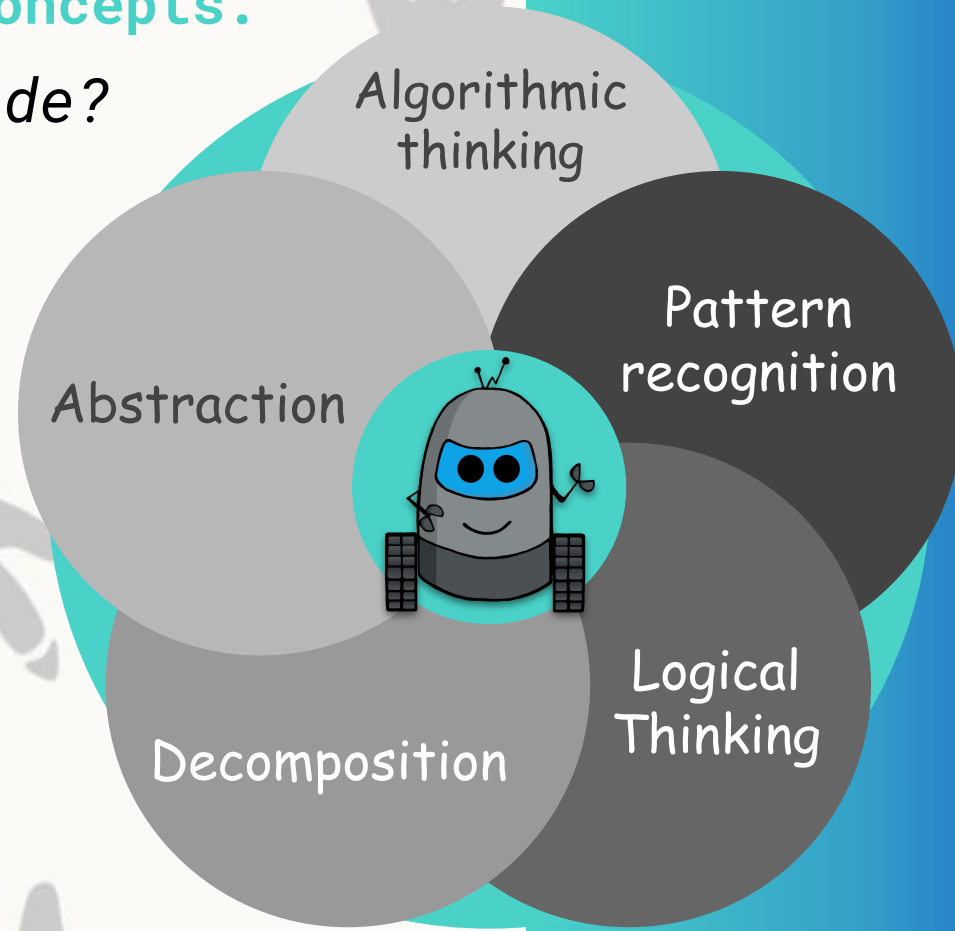
What is computational thinking?

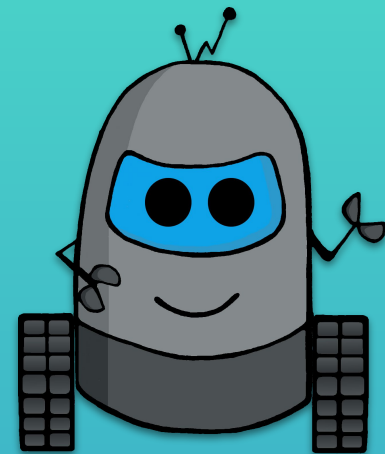
Computational Thinking Concepts.

Did you break the code?

In the next few lessons you will learn more about these different concepts.

What do you think these words may mean?

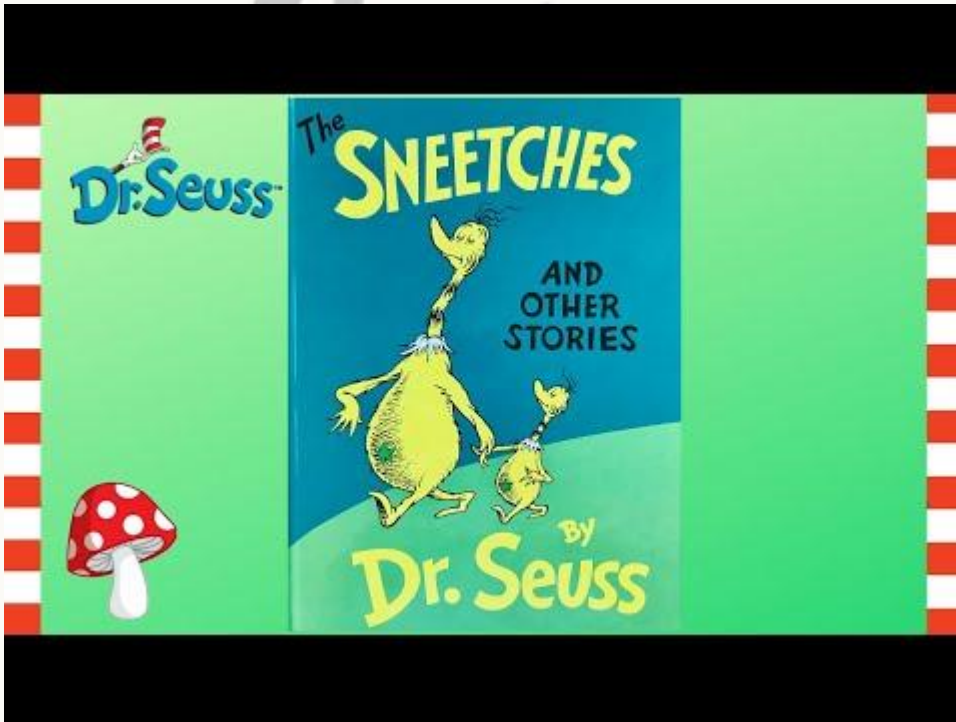




Inputs and Outputs

Inputs and Outputs

Watch the video about the Sneetches...



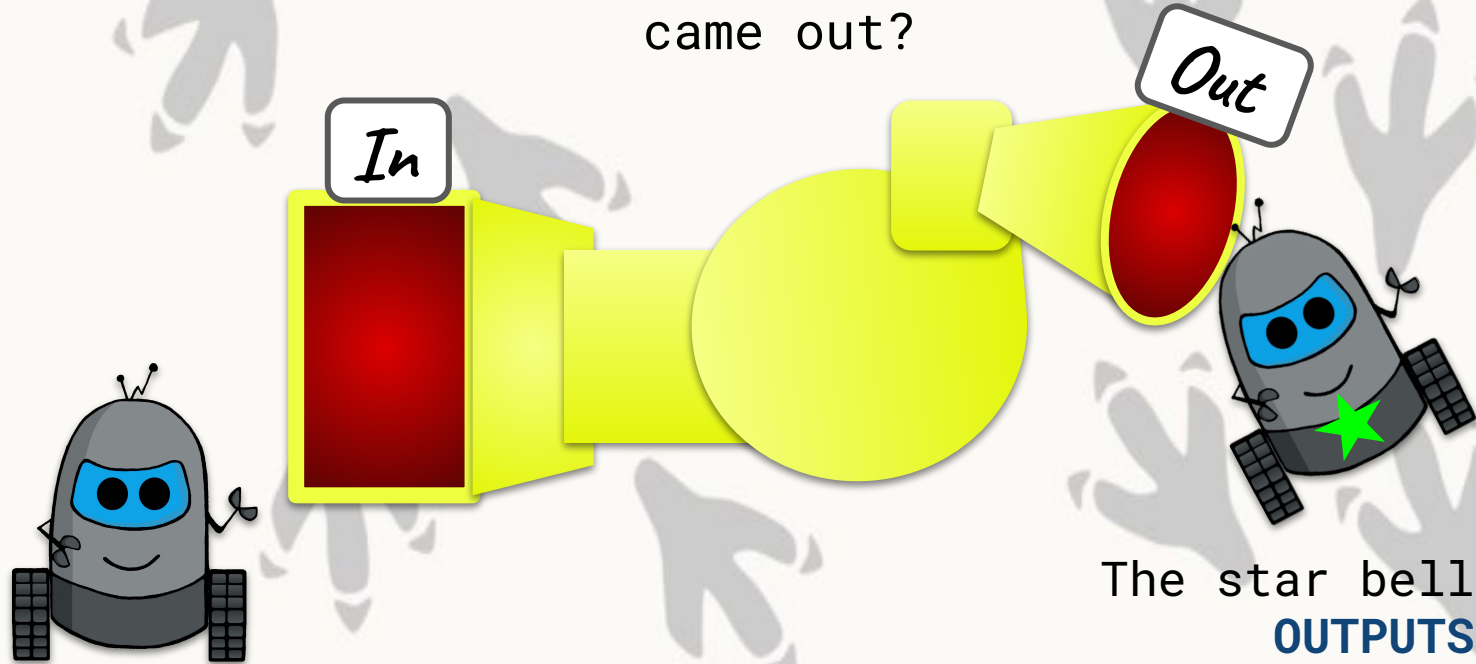
What goes into the machine?

What comes out of the machine?

<https://youtu.be/dZYRR6vCUcY>

Inputs and Outputs

Did you notice what went into the machine and what came out?



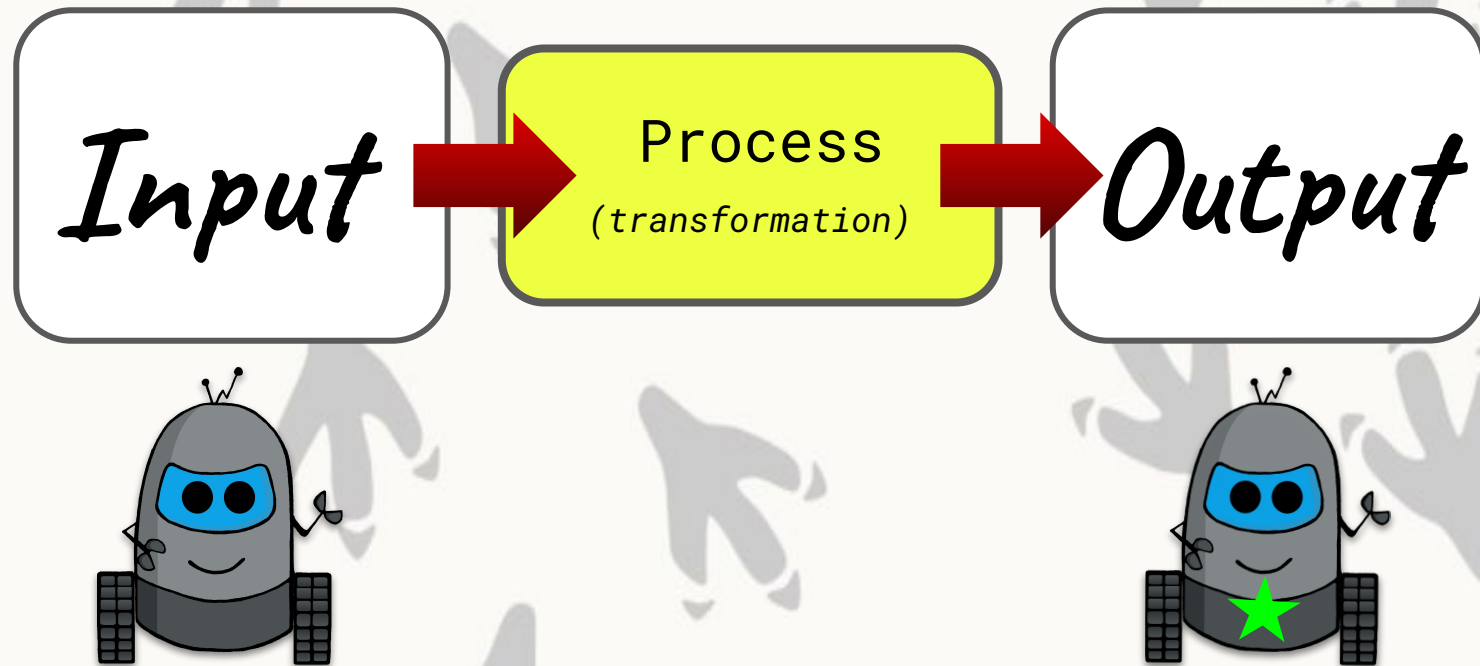
The star bellies are **OUTPUTS**.

The plain bellies can also be known as **INPUTS**.

They are part of a technological system.

Inputs and Outputs

A technological system can also be shown like this:



Inputs and Outputs

Systems diagram for the star bellied sneetch machine:



An **input** is something that is put into a system.

An **output** is something that comes out of a system.

How do you think the machine changes the Sneetches and added stars to their bellies?



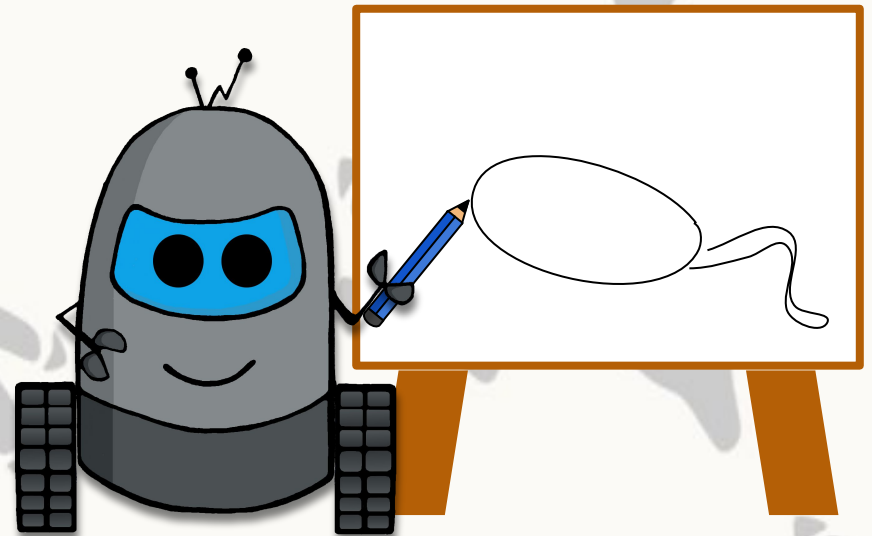
Inputs & Outputs

Activity: Sketching objects

You are going to need a pencil and some paper.

Your teacher is going to ask you to draw an item.

Can you sketch it?



Inputs & Outputs

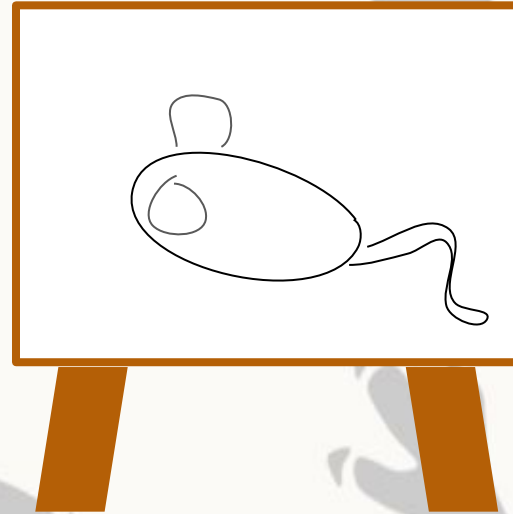
Activity: Sketching objects

Look at your picture and then look at the digital device that is also called by the same name.

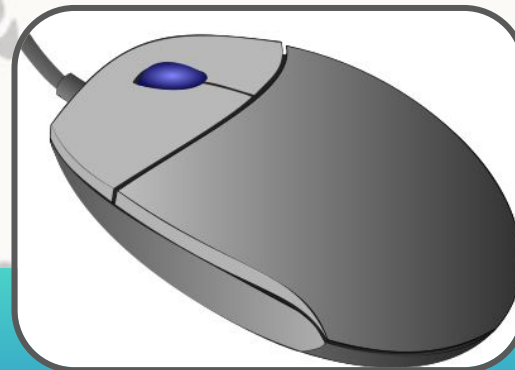
Can you see why it may be called this?

What is similar?

What is different?



Mouse



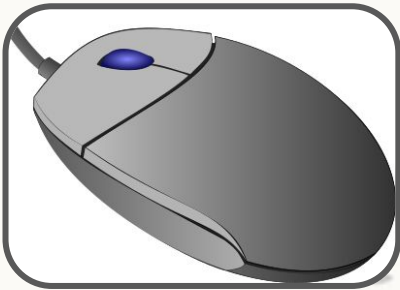
Computer Mouse

Inputs & Outputs

Activity: Digital Hardware

Here are more examples of digital hardware from the sketching activity.

Do you think they are **inputs** or **outputs** in a computer system?



Computer Mouse

Monitor



Tablet



Computer keyboard

Extension Activity

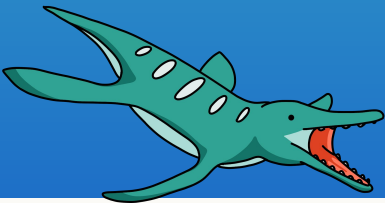
Computer Hardware

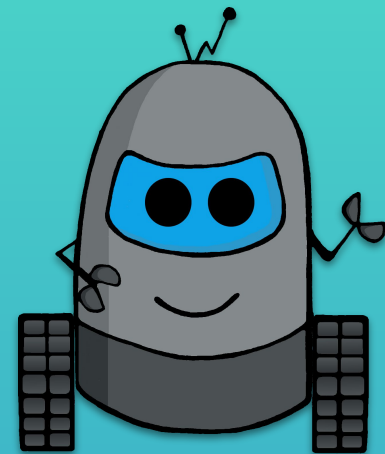
Look at other examples of hardware in a computer system.

What are they?

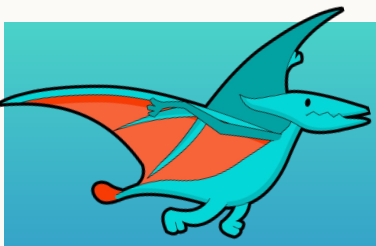
Are they **inputs** or **outputs**?

Or are they part of the process?





Reflection



Reflection: Lesson One

Learning Intention:

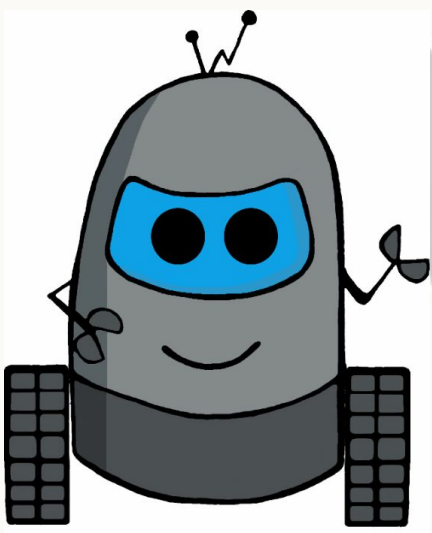
...to understand inputs and outputs in computing.

How do you feel about today's lesson?



What were the key takeaways from the lesson today?

What would you like to learn more about?



Play Code Learn



Thank you!