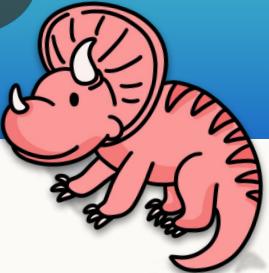


Play Code Learn

DINOSAUR STEPS



Lesson One:  
What is computational thinking?

# Lesson One Learning Outcomes

## Learning Intention:

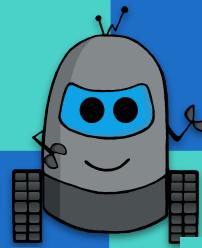
...how computational thinking is important in computer science and programming.

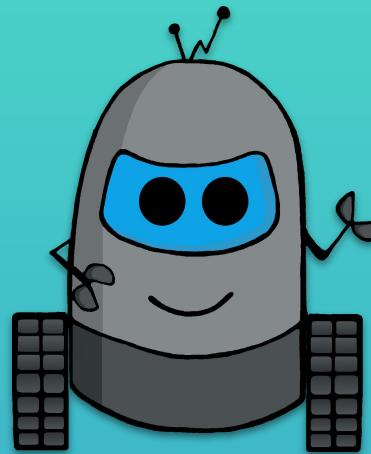
To understand the impact of digital technologies on our lives.

To explore the links of computational thinking to other learning.

To learn the concepts of computational thinking.

To understand how computational thinking can help us.



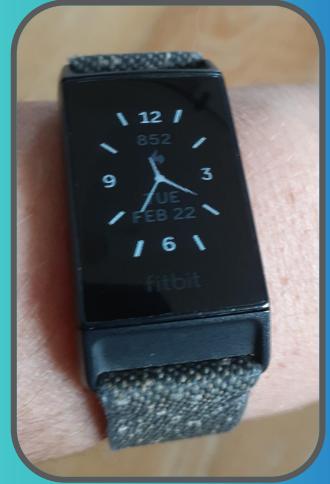


# Computer Science & Digital Technologies in today's world

Copyright ByteEd

Play Code Learn: Dinosaur Steps

# Discussion: Digital Devices in the world around us.

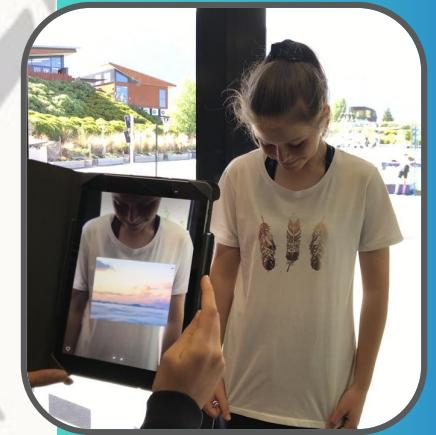


What different digital devices can you think of at home?

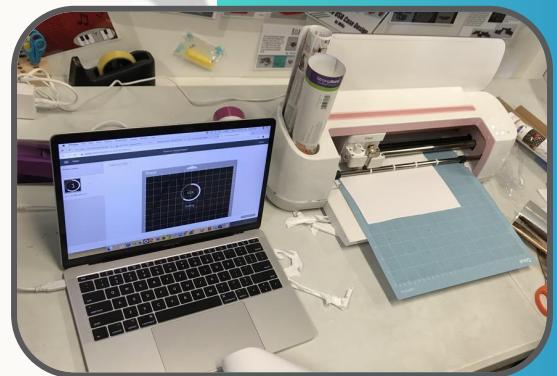
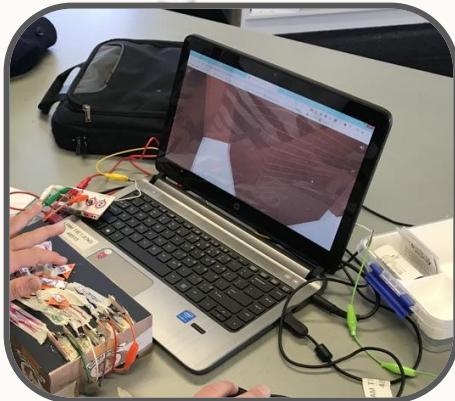
What do they do?  
How do they help us?



# Discussion: Digital Devices in the world around us.



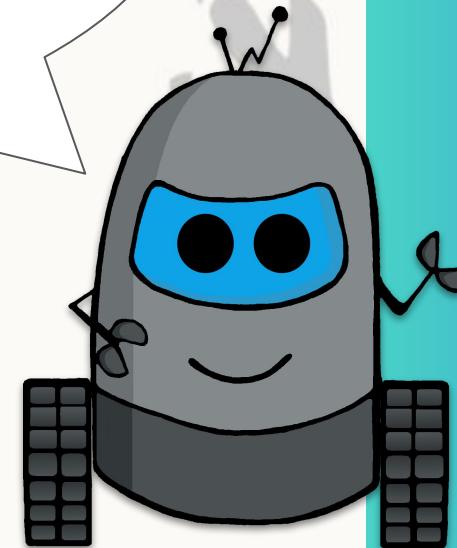
What about in the classroom?  
*What do you use at school?*  
*How do they help you?*



# Discussion: What is Digital Technology?

**What is digital technologies or computer science?**

*How would you describe it?*

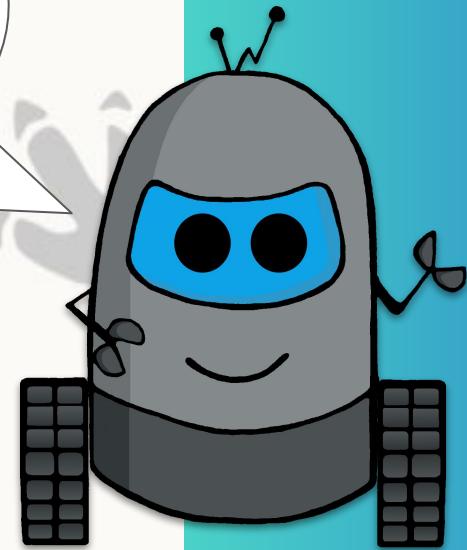
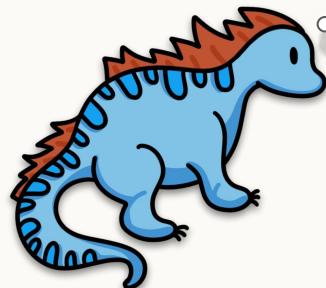


# Discussion: What is Digital Technology?

Can you think of different types  
of digital technologies?

*What are they?*

3D printing?  
Programming?



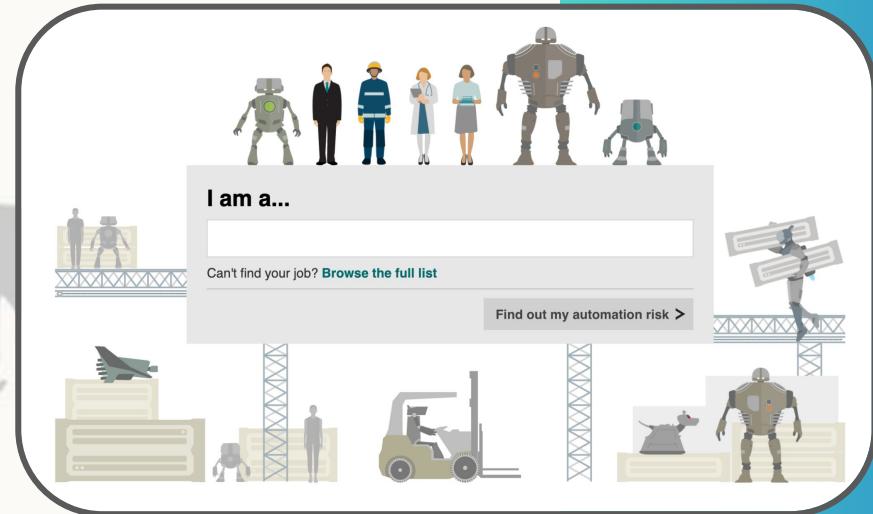
## Discussion:

# How could digital technologies affect our future?

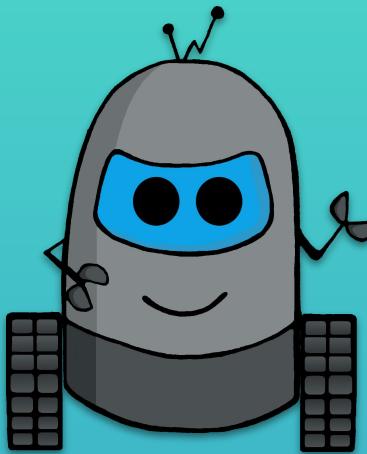
Look at this BBC website:

<https://www.bbc.com/news/technology-34066941>

Will a robot take your job?



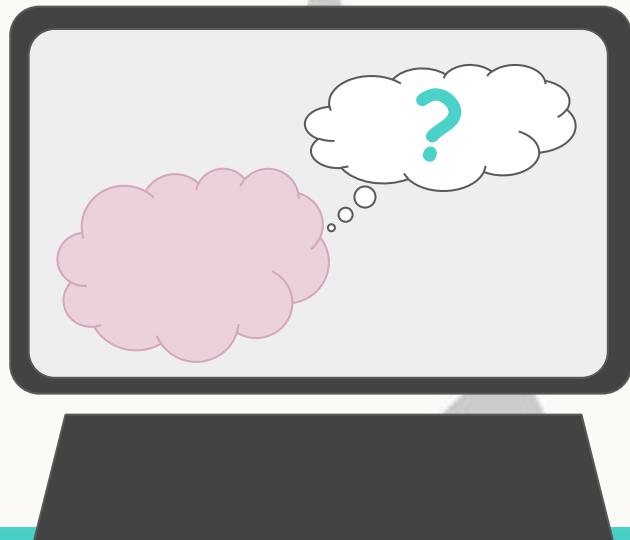
*What jobs will be done by robots or computers in the future?*



# What is Computational Thinking?

# What is computational thinking?

## Can computers think?



*What do you think?*

# What is computational thinking?

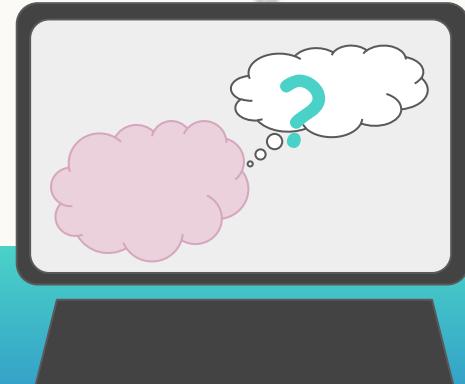
So, what is **computational thinking**?

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.

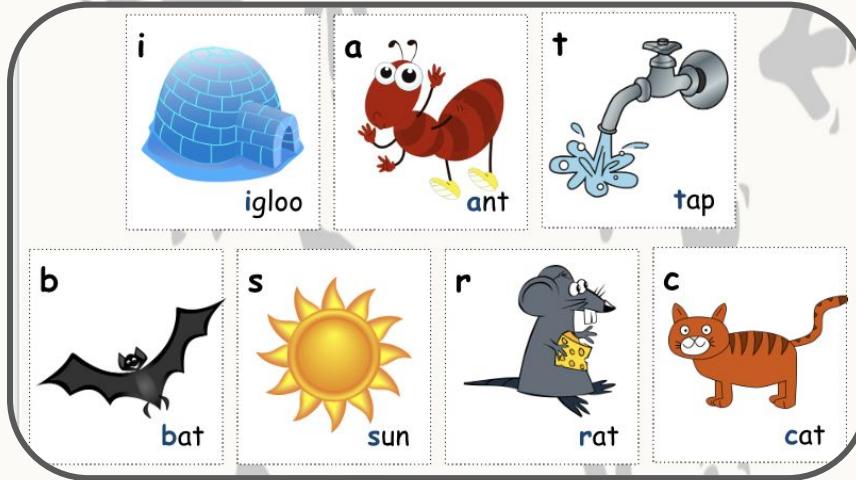
**Computational thinking** enables you (a human) to work out exactly what to tell the computer to do.

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



# What is computational thinking?

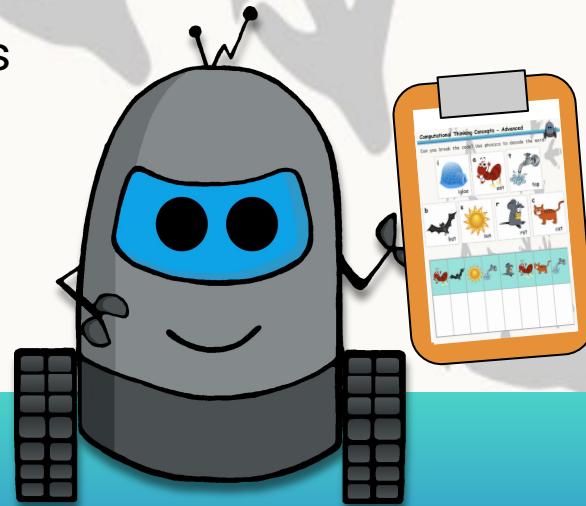
## Activity: Computational thinking concepts



Use the symbol cipher to decode the letters and sounds to give you words linking to computational thinking!

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

*Can you break the code?*



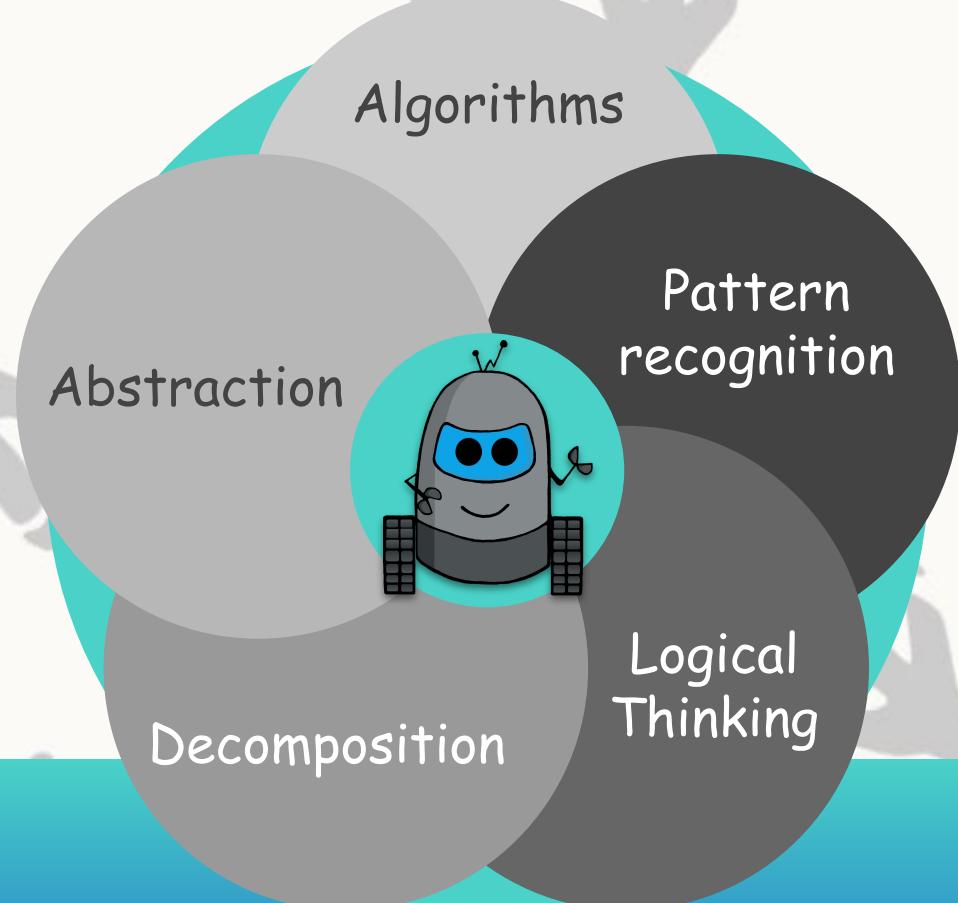
# What is computational thinking?

## Computational Thinking Concepts.

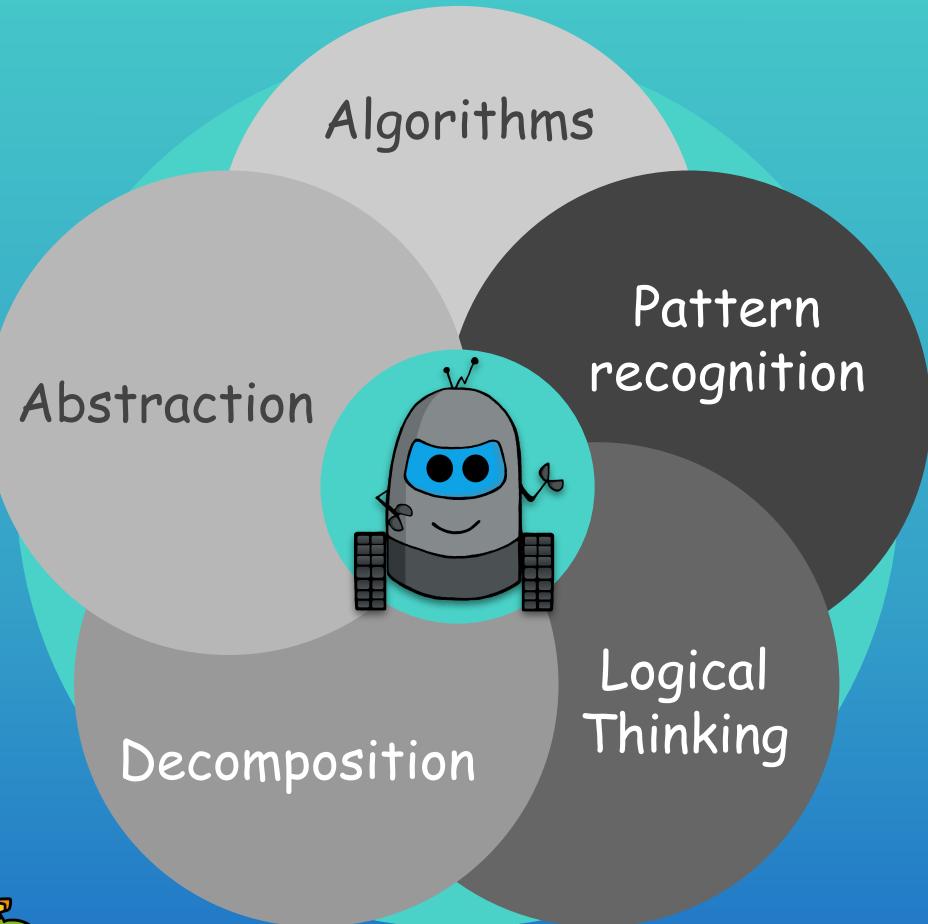
*Did you break the code?*

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

*What do you think these words may mean?*



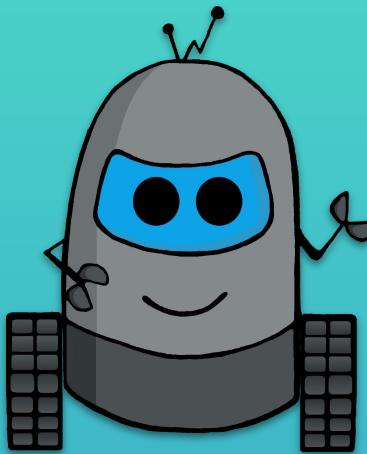
# Extension Activity



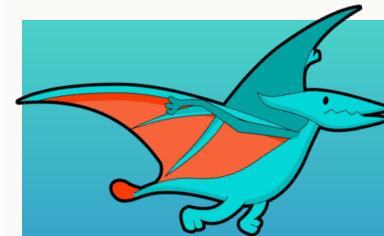
Did you know that you can use computational thinking in lots of different subjects and not just in digital technology?

Can you think of other subjects that use computational thinking?

For example; drawing repeated patterns in Visual Art or writing instructions to make something in a logical order.



# Reflection

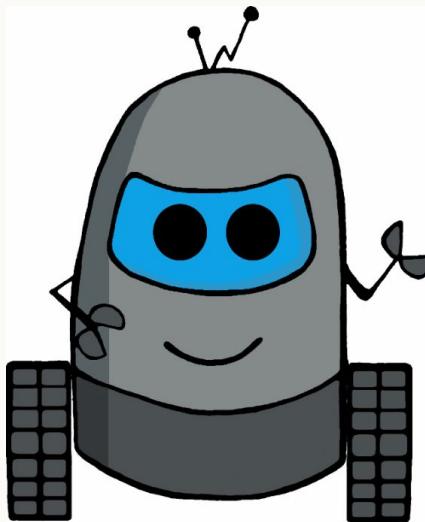


## Reflection: Lesson One

### Learning Intention:

...how computational thinking is important in computer science and programming.

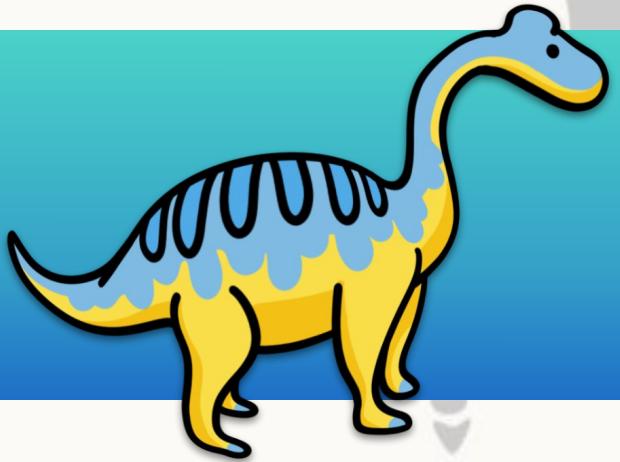
How do you feel about today's lesson?



What were the key takeaways from the lesson today?

What would you like to learn more about?

# Play Code Learn



Thank you!