KIDCODER: ABSTRACTION

10MIN

20MIN

STAGE 3

AIM OF ACTIVITY

How do we decide on what we need to complete a task? Sometimes it comes naturally and other times we have to think! In both cases we are using computational thinking...

WHAT YOU'LL NEED

- A number of random objects

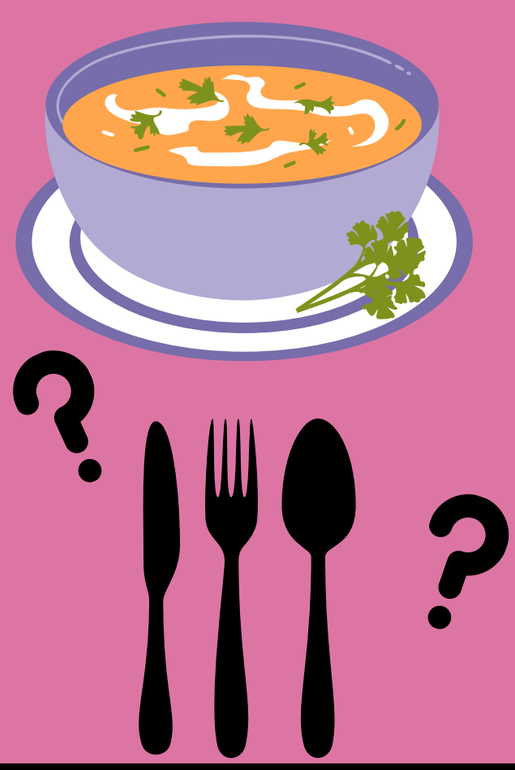
Examples: A spoon, a ball, a candle,

WHAT YOU'LL GET OUT OF IT

- Understand what it means to use abstraction
- Learn how we can use abstraction in our daily lives!

ABSTRACTION

Abstraction is part of computational thinking and we do it when we focus only on the important information that helps us to complete a task. You probably used abstraction today when choosing what utensil to eat your breakfast with!



https://github.com/naomifelix/KidCoder-2.0-Teaching-Computational-Thinking-Concepts-Through-Resources-and-Play

KIDCODER: ABSTRACTION

WHAT TO DO

(1)

We use abstraction all the time without realising! It allows us to have a general idea of a problem before we get into the specific details.

(2)

Choose an object or animal that can vary in appearance – for example, a ball or a dog!

(3)

We are going to create a model for our object/animal by thinking about general characteristics that represent our object/animal.

(4)

Draw your chosen object/animal and label it with its general characteristics. Then draw as many different variations of it you can think of underneath!

USING IN THE CLASSROOM

In pairs, can you think of the general characteristics between the two of you? What is the importance of using abstraction in our daily lives? Discuss with your partner and write down what you think!

TAKE IT FURTHER

In the same way you generalised the characteristics of your chosen object/animal, try and do the same with a situation! For example, if we are cooking a meal, what things will be the same no matter what we are cooking?