

# KIDCODER: LET'S BAKE A CAKE!

# ABSTRACTION









#### **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...

## STAGE 2

### WHAT YOU'LL NEED

 Two or more different types of cakes: a cupcake and a chocolate cake would be great!

## WHAT YOU'LL GET OUT OF IT

- Understand what it means to use abstraction
- Learn how we use abstraction when baking a cake!

## **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! We're going to use abstraction to help us choose what we need to bake a cake!





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# ABSTRACTION



### WHAT TO DO

**(1)** 

Abstraction allows us to remove specific details of a problem and keep the general, most important patterns.





**(2)** 

When baking cakes, there are certain general patterns that won't change no matter what type of cake we are baking.

(3)

For example, we need to know that the cake needs to be baked for a specified time. Can you think of other general patterns?



(4)

Can you think of some specific details about baking a cake that may be different for different cakes? For example, we should know how long to bake the cake for.

# USING IN THE CLASSROOM

In pairs, write down as many general patterns you can think of for baking a cake, leaving space between each one. Now underneath each general pattern, write it in a detailed way to make it specific to a particular cake.

### **TAKE IT FURTHER**

Think of two very different types of cakes. Write down as many similarities and difference between them you can think of!