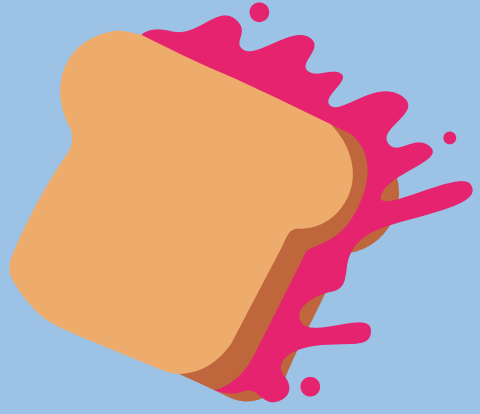# KIDCODER: LET'S MAKE A JAM SANDWICH!

DECOMPOSITION

5MIN

20MIN

STAGE 1

AIM OF ACTIVITY

What do we do when we face a big problem? One thing that can help is breaking the problem down into much smaller, easier problems.
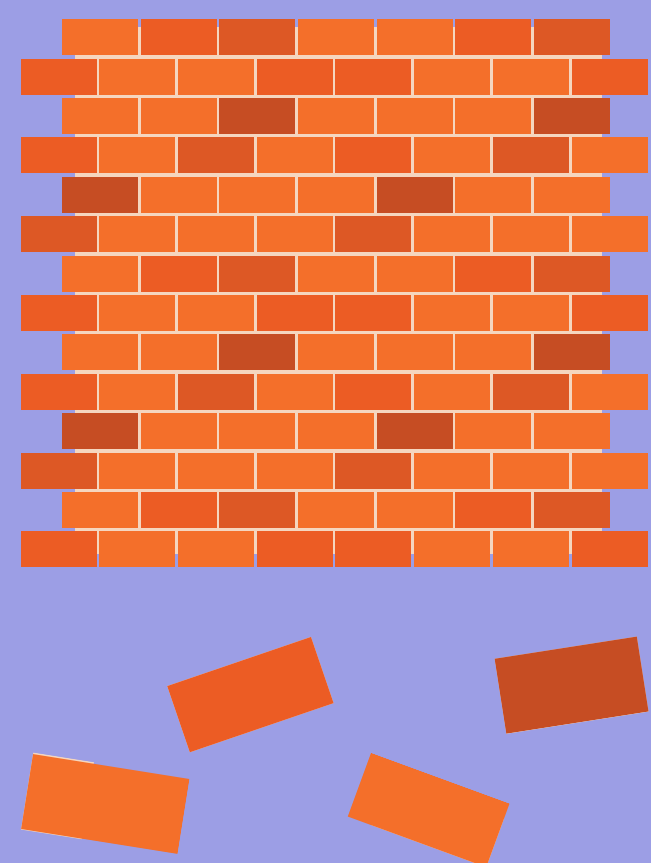
WHAT YOU'LL NEED

- Some of the items needed to make a jam sandwich – a plate, a knife, sliced bread, butter, jam...

WHAT YOU'LL GET OUT OF IT

- Understand what it means to use decomposition
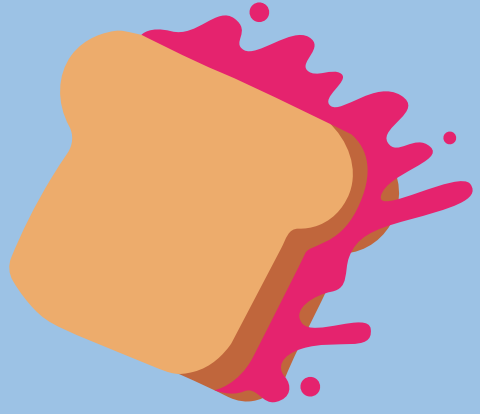- Learn how to use decomposition to make a jam sandwich!

DECOMPOSITION

Decomposition is part of computational thinking and it can be used to break down one big task into smaller, simpler tasks. In the same way, a wall can be broken down into each individual brick. Here we can use decomposition to break down the task of making a jam sandwich!
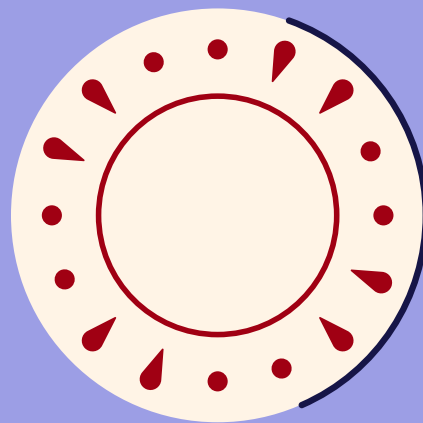
KIDCODER: LET'S MAKE A JAM SANDWICH!
DECOMPOSITION

WHAT TO DO

(1)

We can break down the task of making a jam sandwich by thinking about all the elements we need, when we need them and why we need them.
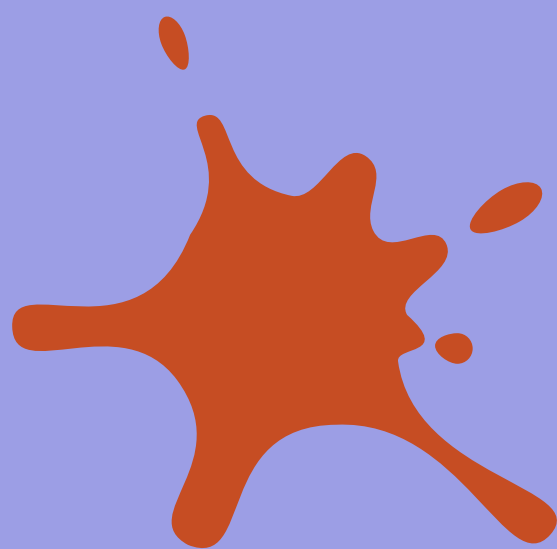
(2)

We definitely need a plate to make a jam sandwich. How early into the task do we need the plate? What do we do with the plate?

(3)

What about the jam? Do we need this at the very beginning or a bit later on?

(4)

Try and think of any other elements needed to make a jam sandwich, what they are used for and at which step they may be introduced.

USING IN THE CLASSROOM

In pairs, use the items displayed by your teacher to create the steps for making a jam sandwich. Remember, a step may contain more than one item.

TAKE IT FURTHER

Are there any steps where two or more elements are used together? Try and name all the elements used in a particular step.