

# Decomposition Challenge

## Decomposition

Decomposition is a very important part of computer science! Decomposition is the process of breaking complicated problems into smaller, more manageable parts. Doing this makes it easier to manage and work with the small parts. This helps the brain of the computer (the 'CPU' – Central Processing Unit) to function better!

## The Challenge – Dance Routine

Find a dance routine you like, either online or on TV. Don't choose one that's too complicated or too difficult for you!

Break the routine down into parts – what the move is, and how many of it you need to do (e.g. clap your hands two times).

By reducing the routine into small parts, it will be easier to learn, as you can learn one stage at a time!

## What You'll Need

Pens/pencils  
This handout, or plain paper  
A dance routine  
Space to dance!

## Why are we doing this?

Decomposition is used in computing to break down large, complex problems into small sections that are easier to understand and can be shared amongst multiple people.

# Dance Inspiration



YMCA

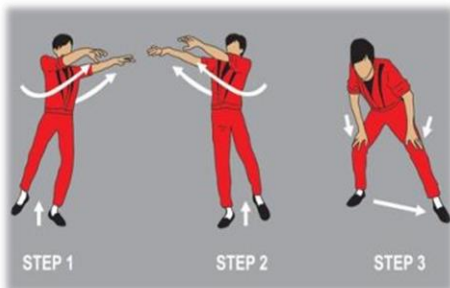
Gangnam Style



Flossing



Thriller



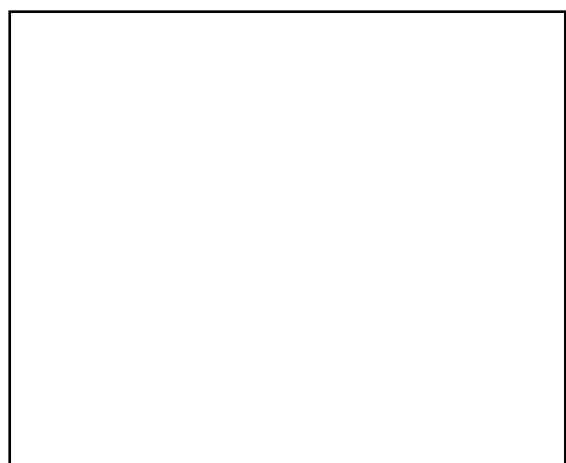
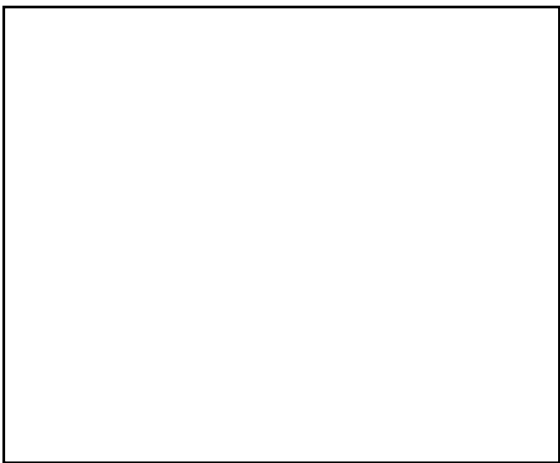
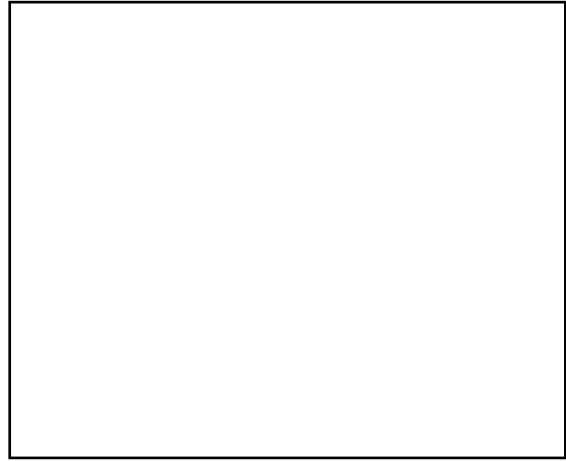
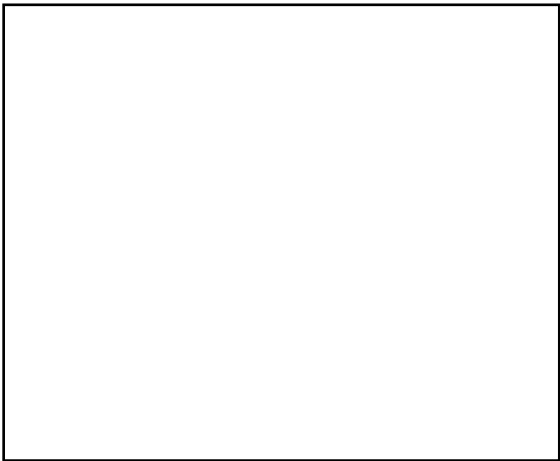
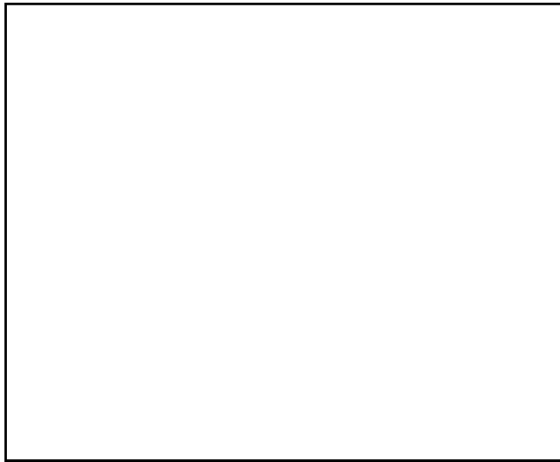
Macarena



**OR... use exercise moves to make the dance even more interesting!**

**You could include jumping jacks, star jumps, stretches etc.!**

# Dance Routine



**Extension:** Create your own dance and decompose it into small parts! Use this to teach someone else the dance!

To create your own boxes, use a pencil and a ruler, and draw plain paper.