

## Overview

In this activity, your child/children will become code breakers by solving a series of codes related to the first verse of a poem by Roald Dahl.

### Concepts:



Logic



Decomposition



Persevering

**Age group:** 9 – 11

**Duration:** 15 – 45 minutes

### Materials you will need:



Code breakers worksheet

(This is provided as a download)

## What will your child/children learn?

**Logical reasoning** – Logical reasoning helps us explain why something happens. Logic is used throughout the activity as your child/children use their existing knowledge of spelling rules and rhyme from the information they are given (the letters) to work out the code.

**Decomposition** – Decomposition is the process of breaking down a task into smaller, more-manageable parts. It has many advantages. It helps us manage large projects and makes the process of solving a complex problem less daunting and much easier to take on.

**Persevering** – Persevering is being determined, resilient, tenacious – never giving up. Persevering is an important skill throughout this activity as your child/children need to keep going despite the fact that they may find some of the codes tricky.

The behaviours **creating**, **persevering**, **collaborating** and **tinkering** (changing things to see what happens), are approaches to learning that are encouraged throughout our home activities.

## Getting started

- 1) Explain to your child/children that they will be using logical reasoning for this activity to crack some lines of code.
- 2) Explain that logical reasoning is concerned with solving a problem rather than simply 'knowing' the right answer. It is the journey, rather than the destination that is important.

## Their turn

- 1) Share the Code Breaking activity worksheet and save the answer sheet for later, then explain that you have no further information and that they will have to try to decipher the code as best they can. You could give a hint that numbers represent letters of the alphabet.
- 2) Explain that once they crack the jumbled up code, they will need to reorder it. Explain they will have to use their knowledge of rhyme to decipher the first verse of a poem by Roald Dahl.

## Time to talk

- 1) Explain that decomposition is a fundamental skill and has many advantages. It helps us manage large projects and makes the process of solving a complex problem less daunting and much easier to take on. When working with computers it helps us break down complicated problems, focus on one part at a time and share the work with others.
- 2) Explain that your child/children has used decomposition to break the code into each individual letter and then complete the final poem verse.

## More ideas

- Can you challenge your child/children to punctuate the poem verse?
- Can your child/children create their own code using their favourite poem or lyrics of a pop song or maybe a coded message? Can they get a family member to decrypt their message?

*Barefoot would like to thank the publishers Penguin for allowing us to use this poem written by Roald Dahl as a resource. The verse has been extracted from "Little Red Riding Hood and the Wolf" from the "Revolting Rhymes" collection.*