Barefoot
from Computing at School | BT

Mini Missions
to build computational thinking skills

Our quick, easy to do activities provide fun ideas to get children practising their computational thinking skills.

Split into the six computational thinking concepts it's easy to discover new ways to introduce and reinforce learning from school and at home.

Algorithms
Making steps and rules

Cooking

Activity

Make something to eat with your child. Can they draw or write the instructions (an algorithm) for someone else to follow to recreate the dish?

Learning

Algorithms are used in everyday life, such as recipes. It is just producing a set of instructions or rules which can be followed accurately.

My Amazing Game

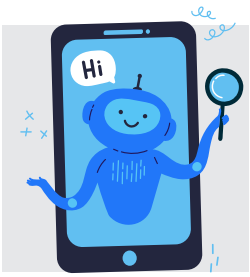
Activity

Ask your child to invent a game to play around the house and write out the rules (an algorithm). Play the game with them - do the rules explain everything about how to play? Can you find any loop holes in their rules?

Learning

Algorithms can be rules as well as a sequence of instructions. The rules need to be precise and specific.

Robotify Me



Activity

Ask your child to write the instructions (an algorithm) for something they've done today.

Would a robot version of themselves be able to follow this? Is their algorithm precise enough? Test it!

Learning

Here your child has written an algorithm. Algorithms are a precise sequence of instructions or set of rules for completing a task.

Timetable

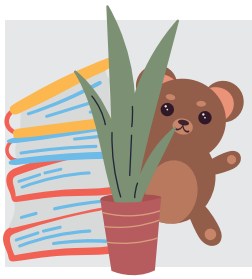
Activity

Ask your child to create a step-by-step timetable for tomorrow. What will they do first? Next? Then? Can they present their timetable in an easy to read format for others to follow?

Learning

Algorithms can be presented in different ways, here our timetable showing what we will do first, second, next is an algorithm.

Teddy Hunt



Activity

Ask your child to hide their teddy/toy in another room in the house. Ask them to draw, write or speak the instructions (an algorithm) for someone to find it. They need to be precise with their instructions if they want their teddy found quickly!

Learning

This activity helps demonstrate why algorithms need to be precise. If they're not, the teddy won't be found!

Providing skills for tomorrow with BT and Computing at School as part of the Barefoot Computing programme