

Loti-Bot's Great Adventure

Develop children's programming and mathematical skills, while they plan Loti-Bot's Great Adventure!



SKILLS AND LEARNING

- Learn about Loti-Bot's different sensors.
- Design, write and debug programs using Loti-Bot's different inputs and outputs.
- Estimate, measure and record lengths.
- Work collaboratively with others.

RESOURCES

- Loti-Bot and App
- Materials to create a Loti landscape such as cardboard, boxes, paper, tunnels, etc.
- Stopwatches
- Rulers including metre rule
- Large paper or desk for drawing Loti-Bot's route

INTRODUCTION

Look at the different features of Loti-Bot and the app as a whole class. Give children some time to explore each of the inputs and outputs in small groups. As they find a feature, encourage them to write it on a sticky note and create your own collaborative Loti-Bot user manual.

Discuss – have children used any other robots/devices that they can programme in different ways? What are the similarities and differences that they can see?

ACTIVITIES

Children will create their very own Loti landscape that they can explore with Loti-Bot! They may want to create landmarks, tunnels, obstacles, people to meet or places for Loti to visit.

When they have created their Loti Land, can they plan some different journeys for Loti that test out the different features (inputs and outputs) they identified earlier.

For example:

- With Loti's pen down, they could plan and track their journey. What pattern have they made? Could they measure the total distance that Loti has travelled by measuring each of the lines?
- They could change Loti's speed to test and time Loti's journey using stopwatches.
- Could they find a shorter route for Loti-Bot to make the journey?
- They could programme the sounds, LED lights or bumper sensors as Loti moves around the landscape, such as a honking horn as Loti passes a friend.

As children explore, bring in aspects of literacy, by encouraging them to tell stories about Loti-Bot's Great Adventure

REFLECTION

Encourage children to share and reflect on their Loti journeys:

- Did you use all of Lot's inputs and outputs in your programs?
- Which is your favourite programmable feature?
- What would you do differently next time?
- Were there any features we did not identify at the start of the lesson?