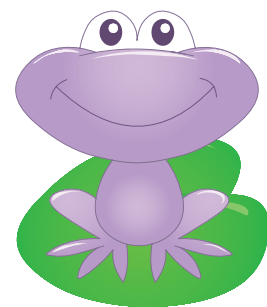


# Froggy frenzy



## Learning objectives

- **Using and applying:** Present solutions to problems in an organised way; explain decisions and methods in pictorial, spoken or written form
- **Understanding shape:** Follow and give instructions involving direction and movement

## Problem-solving strategy

Logical reasoning

## Setting the scene

This activity is suitable for groups or paired workers. The aim is to help Froggy to jump from one lily pad to the next by clicking on the arrows and numbers. For each successful jump, a lily pad is collected at the top of the screen. When they have all been collected, the children have to help Froggy back to his island home. Be careful, as one incorrect move and Froggy will end up in the water! Moves must also be made within a time limit or a similar watery fate awaits Froggy.

## Solving the problem

Encourage the children to think through the directions they want to take to reach each lily pad. Movement, especially to the left or right, might be intuitive to some children but others may find it more difficult. Also, on some occasions, children need to plot a course between three lily pads, which requires a higher level of logical reasoning. Remind them that '0' will sometimes be the correct number to select.

## Key questions

**Enquiring:** Which would be the shortest route to move from one lily pad to another?  
**Reasoning:** Can you estimate how many steps it would take to move from this lily pad to the other lily pad? Are there any alternative routes to move between the two lily pads? Does it make any difference if you move up and down or left and right first? Why/why not? How could you check the number of steps you took between different lily pads? (Suggest the use of the follow-up grids on page 31 for checking purposes.)

## Differentiation

**Less confident:** Work with the children to complete the activity at the whiteboard, focusing on just one or two examples initially. Support them with the correct mathematical vocabulary if necessary.

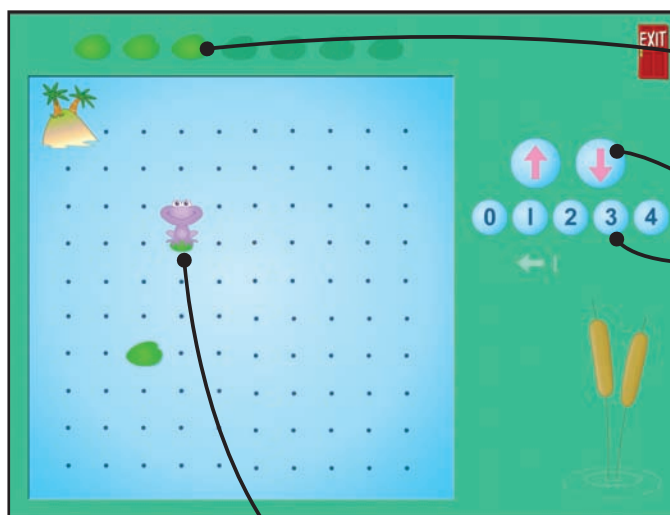
**More confident:** Set a time limit for the children to complete all seven moves.

## Follow up

Let the children use the grids provided on page 31 to plot the route between different lily pads. Ask them to write down the routes they have selected. Challenge one child to prepare a route for a second child to follow. The CD also includes versions with  $5 \times 5$  grids and  $20 \times 20$  grids for additional support or extension activities.

## Problems bank

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2. Collect a lily pad every successful jump.

1. Select the appropriate arrow and number of jumps to move Froggy to the next lily pad.

3. The lily pad Froggy is on will sink if he doesn't jump within a time limit.