

Mathematics Year 1: Find the Numbers

Introduction

- Go to http://www.logo.com/imagine/project_gallery/frogs.HTM
- Download the Frogs program so that children can experience ordering numbers.

Skills involved

What will the children learn?

- To recognise and order numbers at least 1 to 5
- To solve problems and consider the results of their actions.

What prior experience do the children need?

- The ability to count and recognise numbers 1–9.

Equipment

- A computer with 'Frogs' loaded
- Laminated pictures of lily pads and numbered frogs for the extension activity
- A set of cards numbered 1–20.

The Lesson

- Start using the simplest 1–5
- Discuss the position of the numbers, then ask questions:
- Are they in the right place?
- What should be on the first pad?
- Where is it ?
- Where should this one be?
- Show the children how to move the numbers and explain the rules that apply
- Let children work with the program in pairs or small groups to order the frogs, left to right and beginning at the left lily pad, by jumping from one lily pad to the adjacent one or by jumping over one frog.

Why are we using ICT?

This program is colourful and engages the child with a problem to solve. It is easier to use than desk games and the children can see what is happening. There is a demonstration if a child is having problems. Teachers can choose the level of difficulty.

References

QCA Schemes of Work ICT Unit 1A: An introduction to modelling

<http://www.standards.dfes.gov.uk/schemes2/it/?view=get>

National Numeracy Strategy Reception: Comparing and ordering numbers, Order a given set of selected numbers, Reasoning about numbers or shapes Solve simple problems or puzzles in a practical context and respond to “What could we try next?”; Year 1: Solve simple problems or puzzles, Explain methods and reasoning orally, This activity allows children to order digits

http://www.standards.dfes.gov.uk/numeracy/teaching_resources/

Where do we go next?

- Repeat the game with children holding numbers and use the laminated plastic lily pads
- If appropriate, discuss the moves as described in 'differentiating the activity'
- Play games with the cards which children hold and then physically get in the correct order, 1–9. This can be extended to include teen numbers if appropriate
- Introduce ordinal number 1st, 2nd ...
- Repeat the game with the letters of the child's name.

Differentiating the activity

This can be done by choosing the top number of the sequence and discussing the number of moves it took to order the numbers.

Ask questions such as:

- Could it have been done with fewer moves?
- Can you see what's going on, are there any patterns in the moves?
- Does it make a difference if the top number is odd or even?
- Or, if we change the position of the space, does it make the problem easier?

Reflecting on their work

Discuss with the class the strategies they used for the various sequences and aspects they investigated, drawing together any common ideas. Demonstrate these reflections using the program or physically, using numbered children as the frogs. Encourage the children to reflect on their use of ICT and how it made the activity easier than it would be using children or other apparatus.