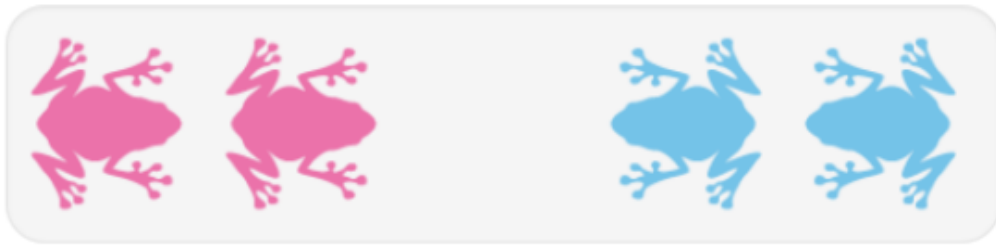


# Frog and lily pad investigation

Imagine two pink frogs and two blue frogs sitting on lily pads, with a spare lily pad in between them.



## Rules:

- Frogs can slide onto adjacent lily pads or jump over a frog.
- Frogs can't jump over more than one frog.
- Frogs can't move backwards

## Your task:

**Can we swap the pink frogs with the blue frogs? Use items from around your house to test this!**

Experiment with different numbers of pink and blue frogs.

Can you predict how many moves it will take you?

Can you see any patterns in the sequence of moves that it takes to swap the frogs over?

Can you explain why those patterns occur?

Number of frogs	Number of moves
2	
4	
6	
8	

## Challenge:

Can you swap the frogs over when the number of pink and blue frogs is not the same?

Can you describe a method for swapping all the frogs over in the minimum number of moves?