You might have seen this puzzle before, there is an interactive version on the NRICH website.

There are five brown frogs and five green frogs sitting on their lily pads, as shown:

![Diagram of frogs on lily pads]

You have to swap the green frogs with the brown frogs, but there are some rules.

*Only move one square at a time.

*You can jump only over one frog of a different colour.

*All frogs can only move forwards from the direction they start in.
FROGS continued...

Question:
What is the smallest number of moves it takes to swap them over?

You might like to start with fewer frogs each end, but what if you start with...

...more frogs at each end?

...a different number of frogs at each end?