

CHANGE THE POSITION-4

With a red and a blue counter you can exchange their positions in three movements: **LJL** o **RJR**

1. I move a counter to the **L**eft (**L**).
2. I **J**ump on a counter of a different color (**J**).
3. I move a counter to the **L**eft (**L**).

With two squares, the least required number of movements to exchange positions is 8. The movements are: **RJLJLJR** or **LJRJJR JL**.

Interpret the code of movements and verify it is right.

With three red and three blue counters, in the board of seven squares, the least required number of movements to exchange positions is 15.

To achieve it is an important success; but it is more important to be able to explain how did you get it, that is, why do you do certain movements and no others. For that you must analyze these questions:

- ?? In general, there are only three possible movements (**L**, **J** and **R**), which one gets me closer to the solution in a faster way?
- ?? During the game, there are situations in which I will have to decide between left or right, which one gets me closer to the solution, bearing in mind the answer given in the previous question?

If you have answered these questions (the answers are simple), you will not have any difficulty in being able to exchange the red and blue counters in just 15 movements. Once you have done it, codify the solution.

YOU WILL NEED:

3 small cubes of each color, the sheet of the game (7 squares), a pencil and a blank sheet.