**Magic rectangles**

 15 min  1 participant

 

**Let’s play**

1. Build a rectangle on the base plate with 3 rows that include 3 bricks in each row.
2. Make it a magic rectangle by rearranging the bricks until each row and column of bricks added together equals the magic number 6.

**How to prepare**

* 1 base plate
* 9 number bricks (3 of each of the numbers “1”, “2” and “3”)
* 1 number sign brick
* 1 bowl

Place the number sign brick on the top left corner of the base plate to indicate that the bricks represent numbers.

Place the other bricks in the bowl.

**Facilitation tips**

* Suggest extra space between bricks for easier manipulation.
* Demonstrate and explain examples of a non-magic and a magic rectangle.
* Ask “What make this is a magic rectangle?”.
* Ask “What was your strategy for completing the activity?”.

**Possible variations**

* Create a magic rectangle with 2 missing bricks.
* Change composition of magic rectangles with the same 9 bricks.
* Create a magic rectangle with number bricks “1” to “9”.
* Construct a rectangle with number bricks “1” to “16” to create a 4 x 4 shape -magic number equals 34.

**Children will develop these holistic skills**

* COGNITIVE - Solve problems that require the organization of multiple data or the construction of an approach that combines reasoning steps (addition and subtraction…)
* COGNITIVE - Explain process of doing, playing
* PHYSICAL - Recognize real situations that can be modeled by geometric relationships (alignment, parallelism, perpendicularity, symmetry)
* PHYSICAL - Use both hands to track across broken lines on a page and identify space between lines
* SOCIAL - Plan and carry out routine or non-routine activities requiring multiple steps

**Did you know**

* Numeracy is not only about numbers: it also relies on self-regulation or executive functions and spatial skills.