

## ETE Magic Number Square

Create a 3x3 grid and use each number from 1 to 9 just once to fill each grid space, so each line adds to 15. It is all created with natural objects that can be moved around.

15 is the magic number every row and column can total for a 3x3 grid, when the numbers 1-9 are only used once. An activity to problem solve and think in numbers all in one.

## **Activity:**

- 1. Use the sticks to create a grid 3x3 in size. Chalk on the floor could also be used. Same dimensions as a noughts and crosses board.
- 2. Find nine different natural items like pebbles, feather, pine cones, seeds. Just 1 object is needed for the first item(eg 1 feather), then 2 items for the second item (eg 2 leaves), then 3 items for the third (eg 3 twigs) etc up to 9 items. This will be 45 items in total.
- 3. Start with just one row. Can you select three different items, one for each section of the grid row, so that they total 15 when counting every item in the row.
- 4. Now add items to the remaining grid squares so every row and column add up to 15. Move all the items around until the problem is solved, including the original row if necessary.

Possible Solutions:

6	1	8
7	5	3
2	9	4

4	9	2
3	5	7
8	1	6

## Personal Qualities and Skills

Respond positively in challenging situations
Develop independence and use

Time: 20 min+

**Space:** Any Outdoor Space

Equipment:
Sticks, Small Natural Items
totaling between 1-9.



## Notes:

To make it harder try a 4x4 grid. The magic number is now 34 using numbers 1-16 only once.

Use the board to play noughts and crosses, or replace these shapes with stones and leaves.

Referenced from www.ltl.org.uk

Learning through adventure