

Summer Term Maths Challenge

Wk 4: 18 May 2020

Dear Children, each week I will be setting challenges for you to complete at home. There will be different challenges which will really get you thinking about your Mathematics. I'd love you to try these and send in your solutions. The aim is not to always be 'right' but to get you thinking and talking about Maths.

Good luck and please do return any work to me at : sjackson@march.w-sussex.sch.uk

Mr Jackson



How Close to 25? Game Instructions



Materials: game board, two different colors or counters

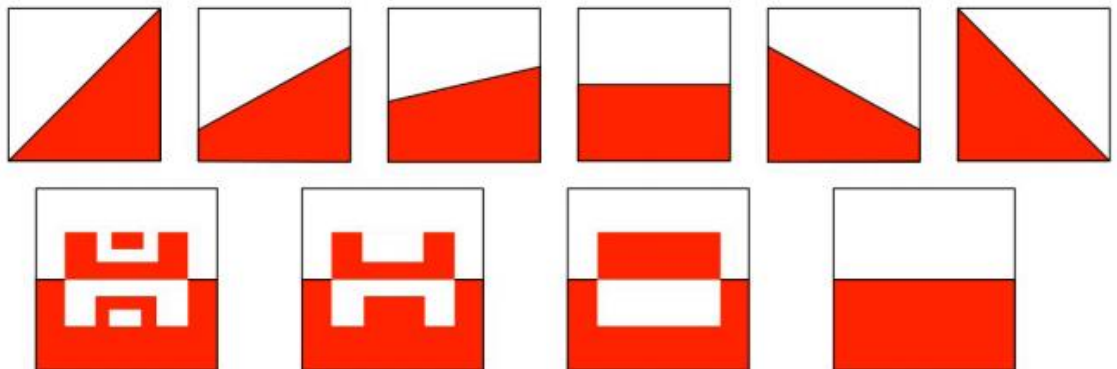
Students working with a partner

- Each partner rolls one die to determine who goes first. The partner with the higher roll goes first.
- Partner 1: Roll one die; color/cover in the number of squares
- Partner 2: Roll one die; color/cover in the number of squares
- Continue until the board is covered.
- Discuss and decide who colored in more squares. Work together to design visual proofs of how to decide.



How Close to 25? Gameboard

Halving Handout



Each of these images shows squares split in half. How can you check that each is correct? How can you convince someone that each is split in half? (Use the additional Halving Handout.) What does it mean to split a square in half? What needs to be true in order for it to be half?

Think of another way to split a square into two halves. Make your own design that splits a square in half.



How to Make a Spirolateral

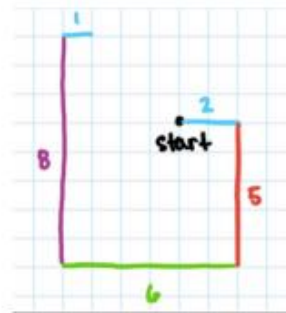
Step 1: Start with any list of numbers. For example:

2, 5, 6, 8, 1

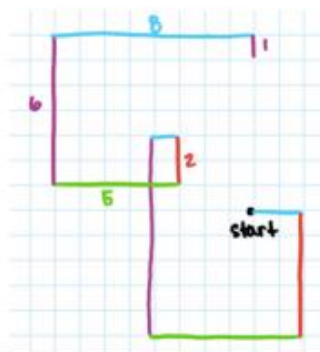
Step 2: Pick a color for each direction.



Step 3: Spiral through your list.



Step 4: Spiral through your list again.



Step 5: Continue until you return to the start or you are convinced that your spirolateral will never return to the start.

