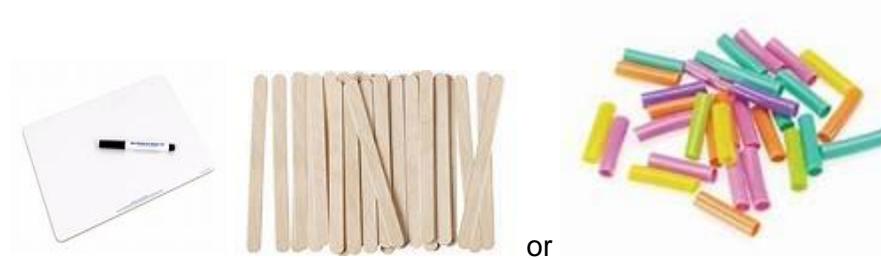**Year 2: Understand remainder for small division sums.**

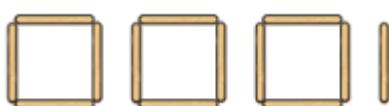# Remainders

Aim of the Game

Make squares with lolly sticks to explore remainders in small division calculations.

You will need

or

Play

- Have a bunch of lolly sticks or straws cut to equal lengths and encourage the child explore making squares and triangles and other shapes with them.
- Encourage children to notice a square is made of 4 sticks.
- Count out 13 sticks and have a guess at how many squares could make with 13 sticks.
  I wonder how many squares we can make with 13 sticks? Each side has to be 1 stick long!
- Find out... They should have made something like this:

- *What can we see?*
  There are ___ squares.
  There are ____ lolly sticks.
  There are __ groups of __.
  There is __ lolly stick left over.
- Show them the number sentence that describes this is   13 ÷ 4 = 3 remainder 1 or 13 r1.
- Repeat a few times with numbers below 20, letting them write the calculation when/if they are ready.

Reflect:

- Can a remainder ever be greater than the number you are dividing by?
- How did you know ___ divided by ___ would have a remainder?

Adapt

- Try it in reverse showing them the calculations like 15 ÷ 4 = 3 r3 and ask them to show what that looks like with lolly sticks.
- Do the same with triangles (dividing by 3).

Maths Talk

Only approach this topic if they are secure with simple division. Check with the teacher if necessary as it may not be covered in class yet. Concrete equipment like lolly sticks and cubes should be used to support children's understanding. Encourage children to make links between division and repeated subtraction as well as multiplication.

Language

There are _____ groups of

There are _____ remaining.

So _____ ÷ _____ = _____ r _____