

## Y3 Maths Projects and Investigations- May 2020

### Repeating Patterns



This pattern has been made from squares of two colours.

What colour will the 17th cube in the sequence be?

What about the 20th? 100th cube?

Can you convince someone else you are right?

Can you find a way of predicting the colour of any square?

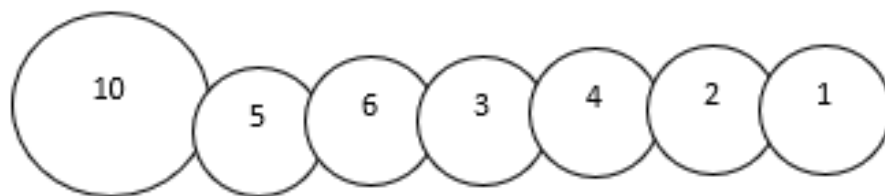
What about these patterns?



Make up some repeating patterns of your own using two colours.

See if you can find a way of predicting what colour any square will be.

## Caterpillars



Caterpillars don't live beyond 100 years old.

A caterpillar age is written on the head. The body parts are made in the following way:

If the number is even, half it

If the number is odd, add one

The pattern continues until you reach 1.

An age 10 caterpillar has 6 body parts.

What patterns do you notice with caterpillars with other ages?

How old is the longest caterpillar?