## Friday problem solving and reasoning

Below are a range of different challenges. Which ones can you take on? We would love to see how you get on so take some pictures of your work and email them over for us to look at. Have fun!!

## The Brown Family



Sally Brown has an equal number of brothers and sisters.
Mark Brown, her older brother, has twice as many sisters as brothers.
How many children are there in the Brown family?

## Biscuit Decorations

Andrew decorated 20 biscuits to take to a party.
He lined them up and put icing on every second biscuit
Then he put a cherry on every third biscuit.
Then he put a chocolate button on every fourth biscuit.
So there was nothing on the first biscuit.
How many other biscuits had no decoration? Did any biscuits get all three decorations?

## 6 Beads

If you put three beads onto a tens/units abacus you could make the numbers $3,30,12$ or 21 .


Explore the numbers you can make using six beads.


