**Squirrels Maths**

**Problem Solving**

**Year 2**

Here are two problem solving questions. Work slowly and carefully to find the answers. Your times tables knowledge will be useful in solving these.

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| 1. | Mr Gilderdale was thinking of a number rule. He asked the class to choose numbers to test so they could try to work out what the rule was.  If the number they chose fitted his rule, he wrote it on the board under 'I like these numbers'. If the number they chose didn't fit his rule, he wrote it under 'I don't like these numbers'.  After the class had chosen four numbers, this is what was on the board:   |  |  | | --- | --- | | I like these numbers | I don't like these numbers | |  |  | | 15 | 18 | | 5 | 22 |   What could Mr Gilderdale's rule be?  If you were in Mr Gilderdale's class, which number would you choose next to test your idea? |
| 2. | I have a pile of nine digit cards numbered 1 to 9.   I take one of the cards.  It is the 3.   Which card would you choose to go with the 3 so you could make the largest possible two-digit even number with the two cards?   We put the cards back in the pile.  This time, I choose the 6. Which card would you choose this time to go with the 6 to make the largest possible two-digit even number?  How would your strategy change if you had to make the largest two-digit odd number? |

**Year 1**

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?