Further Challenge

I am thinking of a 3-digit number.

> When it is divided by 9, the remainder is 3

> When it is divided by 2, the remainder is 1

> When it is divided by 5, the remainder is 4

What is my number?

Possible answers:

129	219
309	399
489	579
669	759
849	939

Encourage children to think about the properties of numbers that work for each individual statement. This will help decide the best starting point.

Always, Sometimes, Never?

> A three-digit number made of consecutive descending digits divided by the next descending digit always has a remainder of 1

$$765 \div 4 = 191 \text{ remainder } 1$$

How many possible examples can you find?

Sometimes

Possible answers:

$432 \div 1 = 432 \text{ r } 0$
$543 \div 2 = 271 \text{ r } 1$
$654 \div 3 = 218 \text{ r } 0$
$765 \div 4 = 191 \text{ r } 1$
$876 \div 5 = 175 \text{ r } 1$
$987 \div 6 = 164 \text{ r } 3$