

Solution

Pupils should first identify that there are five friends in total – Alan, Cormac, Fiona, Jerzy and Sam.

They therefore need a Saturday that has five or more places available for both paintballing and go-karting.

In addition, Jerzy can only go every second Saturday and Sam can only go every third Saturday.

After identifying the relevant common multiples of two and three, pupils should work out that the only Saturdays that both Jerzy and Sam can go are the 6th and 12th Saturdays.

Looking at the places available on the 6th and 12th Saturdays:

	Paintballing	Go-karting
6 th Saturday	6	7
12 th Saturday	9	4

The only day that has five or more places available for both paintballing and go-karting is the 6th Saturday.

Cormac should choose the 6th Saturday.

