

## **Week 6**

### **Zios and Zepts**

On the planet Vuv there are two sorts of creatures. The Zios have 3 legs and the Zepts have 7 legs.

The great planetary explorer Nico, who first discovered the planet, saw a crowd of Zios and Zepts. He managed to see that there was more than one of each kind of creature before they saw him. Suddenly they all rolled over onto their backs and put their legs in the air.

He counted 52 legs. How many Zios and how many Zepts were there?

Do you think there are any different answers to this that would work?

#### **Key questions**

What have you tried so far?

What happens if you replace this seven-legged creature with some three-legged creatures?

What happens if you replace these three-legged creatures with some seven-legged creatures?

#### **This is a little easier**

If Nico saw 6 legs what creatures might he have seen? And how about 14 legs? Or 13 legs?

#### **Possible extension**

You could investigate other possible numbers of legs of a group of Zios and Zepts. Perhaps some can be done in more than one way. How many ways can be found for each target number? The investigations can go on and on!