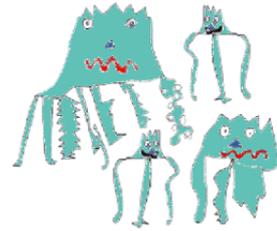


Activity 1

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?

Getting started

Drawing some pictures or using matches/sticks/counters for legs might help.
Do you have any idea approximately how many Zios and Zepts there might be to make 52 legs?

You could try choosing a certain number of Zios and a certain number of Zepts, then count their legs. Do you need more legs or fewer to have a total of 52?

You could write down the multiples of 3 and 7 to help you.

Key questions

What have you tried so far?

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

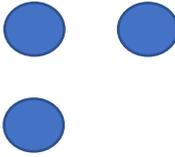
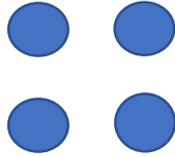
What happens if you replace these three-legged creatures with some seven-legged creatures?

Next

Design your own Zio and Zept creatures and draw them in your learning log. You could label their different features or write a paragraph to describe them. If you love drawing, maybe you could create a few each day so you end up with 52 on the page. They don't all need to look the same but remember to give them the correct number of legs!

Activity 2

Place Value Challenge

Hundreds	Tens	Ones
		

Copy the place value grid into your book, using the squares and a ruler to make it neat. Then work out the 3-digit number that is being shown. Write the number in digits and then in words.

Next, **using only 8 counters**, work out other possible 2- digit and 3- digit numbers that you could make. For example, I made the number 431 by moving one of the counters in the tens column into the hundreds column. You could draw a place value grid on a piece of paper and use buttons/counters/pieces of pasta/stones to try out different possibilities.

Write down as many answers as you can, writing in numbers and in words. Be sure to check your spelling.

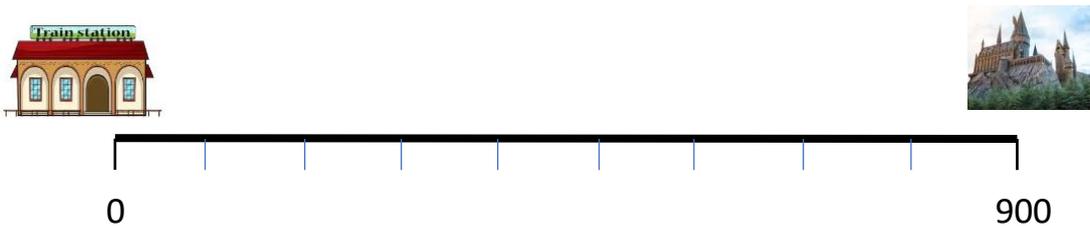
Activity 3

Counting in 50s and 100s



The Hogwarts Express travels between King's Cross Station in London and Hogsmead Station. The journey is 900km.

Bob is the train driver. He made this number line to plan his journey, but he forgot to mark all the stations along the way. Here is what he can remember.



Mountain View Station is 300km after King's Cross.

Lakeside Station is 400km before Hogsmead Station.

Lily Pond Station is halfway between Mountain View and Lakeside Stations.

Chaplin's Peak Station is 50km before Mountain View Station.

The last station is 50km before Hogsmead but Bob has forgotten its name.

Draw an arrow to the correct point on the number line and then come up with an interesting name for the station.

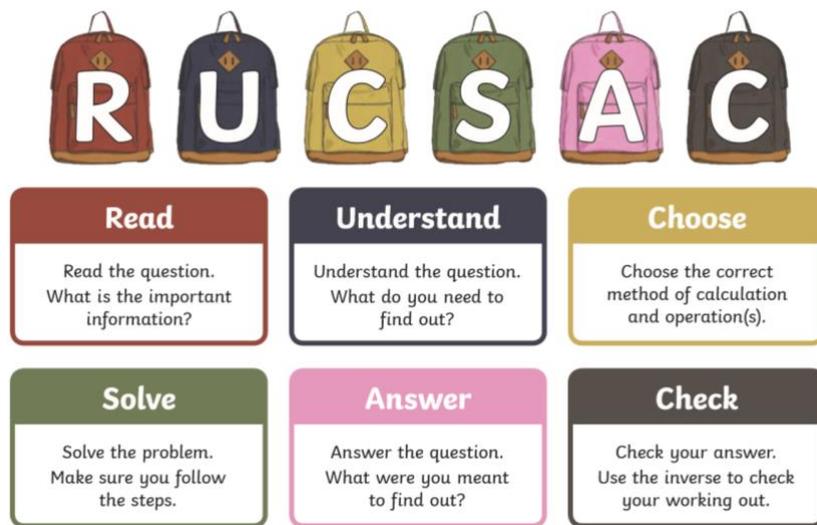
Now copy out the number line using the squares in your book and a ruler.

Make sure you use 2 squares for each 100km. Then use the clues that Bob has given you to add arrows pointing to the stations and the label neatly. Don't forget to think up a name for the last station.

Activity 4

Addition and Subtraction Word Problems

Use RUCSAC to help you organise your thoughts. Remember that the answer won't just be a number (is it monkeys/ children/ apples???)



1. In a cycle shop, a bike costs £280 and a helmet costs £50. What is the total cost of the bike and the helmet?
2. How much more does the bike cost than the helmet?
3. Olivia has 506 fairy lights in her garden. 212 of the lights do not work. How many fairy lights do work?
4. Olivia bought another 86 fairy lights at the market. How many fairy lights does she now have altogether?
5. A chef buys 160 mushrooms and 89 carrots. How many mushrooms and carrots does he buy in total?
6. He uses 72 of the mushrooms to make soup. How many mushrooms does he have left?

Extension: Write and then solve your own addition or subtraction word problem for your parent/sister/brother to solve. Make sure you know the answer before you give it to them.

Activity 5

Counting in tenths

Count in Tenths

Notes and Guidance

Children count up and down in tenths using different representations.

Children also explore what happens when counting past $\frac{10}{10}$

They are not required to write mixed numbers, however children may see the $\frac{11}{10}$ as $1\frac{1}{10}$ due to their understanding of 1 whole.

Mathematical Talk

Let's count in tenths. What comes next? Explain how you know.

If I start at ___ tenths, what will be next?

When we get to $\frac{10}{10}$ what else can we say? What happens next?

Varied Fluency

- ▣ The counting stick is worth 1 whole. Label each part of the counting stick. Can you count forwards and backwards along the counting stick?



- ▣ Continue the pattern in the table.

- What comes between $\frac{4}{10}$ and $\frac{6}{10}$?
- What is one more than $\frac{10}{10}$?
- If I start at $\frac{8}{10}$ and count back $\frac{4}{10}$, where will I stop?

Representation	Words	Fraction
	One tenth	$\frac{1}{10}$

- ▣ Complete the sequences.

