

AUTHOR + ILLUSTRATOR:  
ELLEANORE PHILLIPS  
12 YEARS OLD  
TOWNLEY GRAMMAR SCHOOL

HOW TO DEAL WITH TRICKY

FROM



TO





Lucy Llama was very excited to be going to Sammy Seal's birthday party, but she was even more thrilled when Sammy asked her to help Benny Butterfly buy food for the party bags. She met with Benny to get the list of things to buy a few hours before the party.

"Please may you do me a favour by buying cupcakes for the party bags Lucy? As you know, Sammy did a survey with the guests on what flavours they would like their cupcakes to be, so here is the sheet. Thanks for your help, I have to go now to decorate the venue!" Benny exclaimed to Lucy and gave her the sheet.

"Bye!" Lucy called after Benny. She looked at the sheet and groaned.





"Oh no! It is full of tricky percentages! I will let down Sammy and the other guests if I don't work it out! I can't possibly do this in my head! But maybe Charlene Caterpillar the Cupcake Cook will have a magic calculator to solve these percentages. Hmm, I will go to the bakery and ask Charlene for a magic calculator to work it out and get the cupcakes in time, that's what I will do!" Lucy thought aloud when she trotted off to the bakery.

## Cupcakes - survey results

50 guests so 50 cupcakes  
in total

26% Summer Fruits

20% Dessert Delights

54% Sweetieland Satisfactions



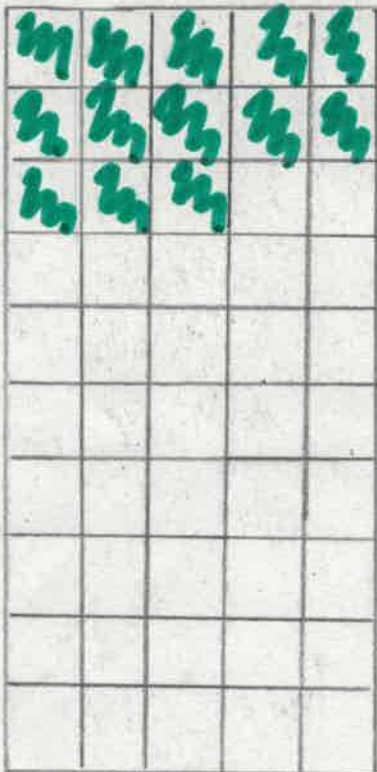
When she arrived at the bakery she asked Charlene, "Please may you work out the amount of cupcakes with your magic calculator? The percentages are too tricky for me. I can't do percentages such as 26% or 54%!" declared Lucy".

"Nonsense, percentages aren't hard! Please pass me the sheet of tricky percentages and I'll prove it to you!" Charlene replied. Lucy Llama passed her the sheet, and Charlene had a look at the list and smiled at Lucy, bemused. "You don't need to have a magic calculator to solve these percentages. I have a trick that doesn't make these percentages as scary as they seem. The trick is to switch the percentages around to see which calculation is easy to do in your head! Percentages are reversible." Charlene advised.



# PERCENTAGES ARE REVERSIBLE

$$26\% \text{ of } 50 = 50\% \text{ of } 26$$



Always choose  
the one that's  
**E·A·S·I·E·R**  
to calculate!

"Switch around the percentages? What do you mean?" asked Lucy, confused.

"Lucy, believe in yourself. You CAN work it out with my trick. You just need to have a growth mindset and keep your mind open to use this new information. Let me explain this concept to you on the percentages that we have here. So the first percentage is 26% out of Sammy's 50 guests who want Summer Fruits Cupcakes. What I mean by switching round percentages is that 26% of 50 is the same as 50% of 26." Charlene explained calmly.

"Can you work out the rest now Lucy?" asked Charlene.

$$26\% \text{ of } 50 = 50\% \text{ of } 26 \Rightarrow 13 \times$$



$$20\% \text{ of } 50 = 50\% \text{ of } 20 \Rightarrow 10 \times$$



$$54\% \text{ of } 50 = 50\% \text{ of } 54 \Rightarrow 27 \times$$



EASY!!

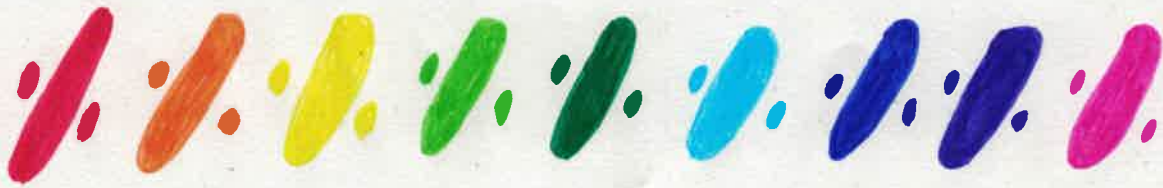
Lucy eagerly started doing the calculations in her head: "I know that finding 50% of something is the same as halving. 50% of 26 is 13, as I know that half of 26 is 13, so 13 of Sammy's guests want Summer Fruits Cupcakes." Lucy was getting more and more excited "20% of Sammy's 50 guests want Dessert Delights Cupcakes. 20% of 50 is the same as 50% of 20 which is 10, so 10 of Sammy's guests want Dessert Delights Cupcakes. 54% of 50 Sammy's guests want Sweetieland Satisfactions Cupcakes, so 50% of 54 is 27, so 27 guests want Sweetieland Satisfactions Cupcakes. Thanks so much Charlene!" Lucy rejoiced.

"See! Percentages are reversible, and you can flip them to see which one is easier to calculate in your head!" Charlene told Lucy.

Lucy bought the right number of cupcakes, which were delicious, and everyone had great fun at the birthday party.

"I will never be scared of fractions again!" Lucy proclaimed. And she never was, for she not only learnt this trick and taught it to other people, she also developed a growth mindset that she used for everything - not giving up and stretching herself to achieve higher and higher goals for herself!





Lucy Llama is put in charge of buying the cupcakes for Sammy Seal's birthday party. But disaster strikes when Lucy gets a sheet of tricky percentages rather than an easy sheet of numbers! Join Lucy on her adventure finding out how to make tricky percentages a *no problama* task. With the help of a friend, will Lucy turn the task into a *drama-llama* task of doom, or will she conquer her fixed mindset and the unknown and help you all with tasks in the future?

#### ABOUT THE AUTHOR

I am Elleanore Phillips and I am 12 years old. I go to Townley Grammar School for girls in Bexleyheath, England. I got the idea of this story when I was in a similar problem, but my amazing mum saved me from doom by teaching me this trick. It's been with me for a couple of years and I take great pleasure in teaching other people the maths tricks that I know, so writing this story was a great way of showing how this trick can help people in real life. Maths is my favourite subject, so I want to show people that Maths isn't as scary as people think, you just need to have a growth mindset and never give up. If you are not scared to make a mistake and love researching maths hacks and tips, maths is the best thing ever. Maths is everywhere in the world, you can't escape it, you need to embrace it, and when you respect maths, maths will become more like an open door rather than a chained doorway. You need to just find the key and stay open to as many opportunities as possible. Keep calm, believe in yourself, and rock on with maths!!!