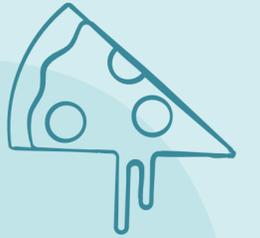




Ellie discovers the science of cookery





Ellie and Priya, as well as Ellie's mum, Susan, and step-father, Kai, had gone into town today to go to the annual food festival being held in the park. Mags, Ellie's favourite teddy, had of course come along too and was hoping to join a milk tasting session.

The annual food festival was a huge event and always very enjoyable.

Ellie and the others had only been at the festival ten minutes when they bumped into Fabian and his mother. Fabian was a big fan of pizza, so it was not surprising that Ellie found him taste testing a variety of vegan pizzas.

Ellie asked Fabian if he had a favourite but he wasn't sure and wondered if he needed to taste them all once more in order to decide. Ellie and Priya laughed.



Ellie and the others then moved on to a demonstration focused on zero food waste. Ellie had been taught a bit about this topic at school and found the demonstration very interesting. Ellie felt she had learnt a lot. The adults were learning too. Kai said he would try the easy pickling ideas at home, and Susan promised to try jam making. Mags's face lit up as she thought of plunging her paw into a jar of homemade raspberry jam.





Having sat and watched the zero food waste demonstration, Ellie, Priya, Susan and Kai (and Mags of course), stretched their legs and headed off into another huge tent where they soon bumped into another familiar face – James.

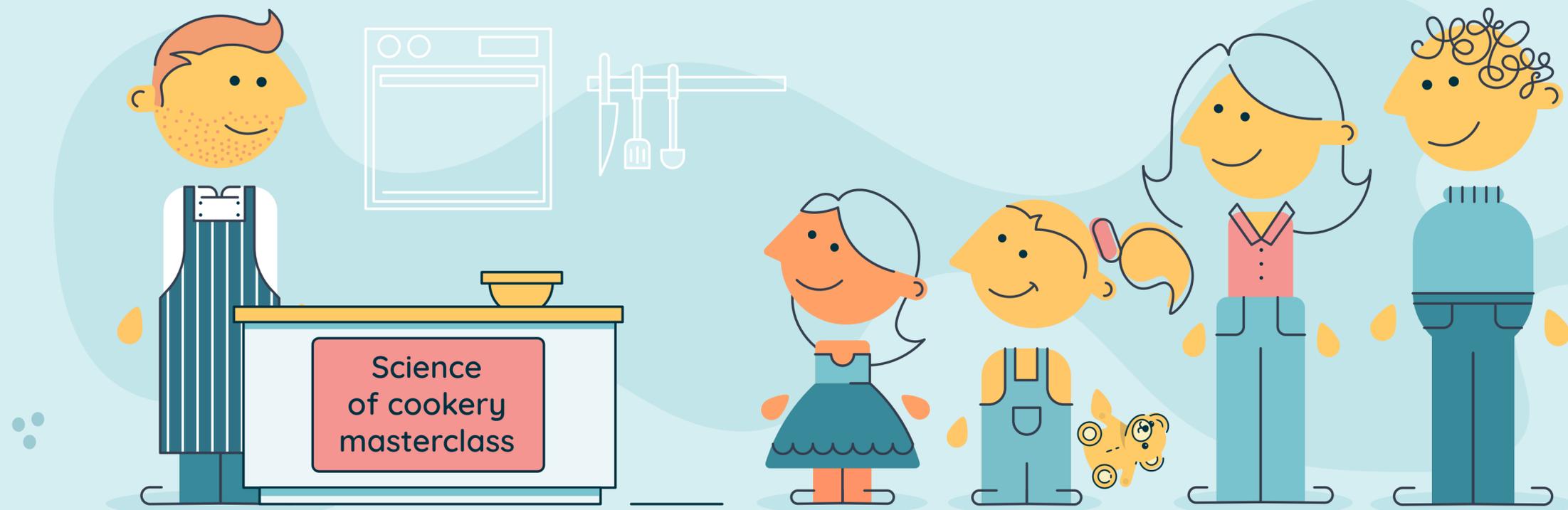
James was with his father and was trying several different organic varieties of broccoli. It was no secret that James’s favourite vegetable was broccoli and so James was having a wonderful time.

“This one has a funny name. It’s called Blue Wind Broccoli. I could eat it all day” said James. “Have you done any taste testing yet?” James asked Ellie and Priya.

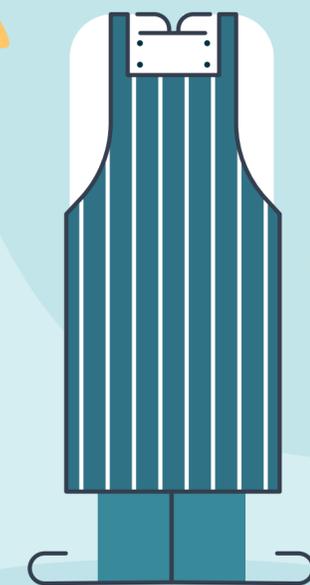
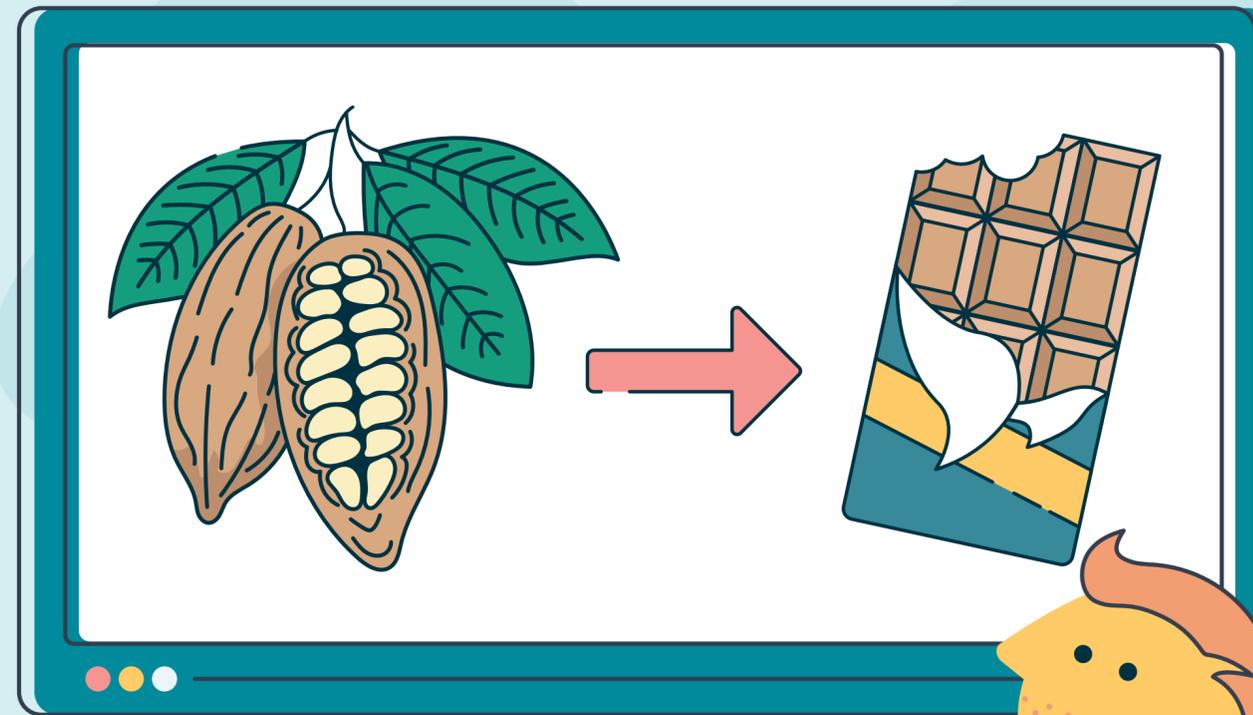
Both the girls told James what they had tried. Susan and Kai also shared what they had enjoyed taste testing too.

After leaving James and his father at the broccoli table, Ellie and the others moved onto the masterclass zone. A festival helper told Ellie and the others that the science of cookery demonstration was about to begin, and helped them find four seats together. Mags had to sit on Ellie's lap which was the perfect excuse for another cuddle.

The science of cookery masterclass was being delivered by an award winning chef, Rob, who started by telling the audience about some of his favourite foods, such as chocolate. Rob went on to tell the audience about chocolate containing several hundred chemical compounds, and being toxic to animals such as dogs, cats and horses – but not it would seem, teddy bears, as Mags licked her lips at the mention of chocolate.



Rob then explained the science behind turning the bitter tasting seeds of the cacao tree into the slabs of chocolate available to buy in shops, as well as explaining how it is possible to tell a chocolate's quality by the sound it makes when it is broken. Rob also explained the science behind why so many people like the taste, before making some yummy looking chocolate brownies during which he demonstrated changing states of matter as he melted the solid chocolate into liquid.





The second topic of Rob's science of cooking masterclass was bread.

"I could do with a few people to help me with a really fun activity – making and baking bread," said Rob as he looked around the audience.

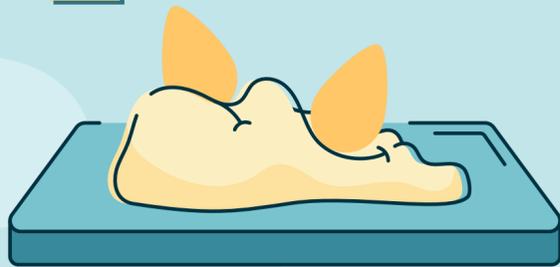
A few hands went up, but Ellie, Priya and Ellie's mum, Susan, were lucky enough to be chosen by Rob to be his helpers.

After the three helpers had washed their hands, they were given aprons to wear.

1 Mix the ingredients



2 Knead the dough



3 Prove the dough



4 Bake in an oven



Rob started by talking about how people have been baking and eating bread for thousands of years.

“There is science behind every step in bread making, and understanding the science helps make wonderful bread” continued Rob.

Rob instructed his helpers to add measured amounts of flour and water to a mixing bowl, before carrying on with his explanations: “Great bread relies on bubbles, but how do we ensure there are enough bubbles in the bread mixture and how do we keep them there to help the bread rise? Let me explain.”

Rob spoke about making the dough, kneading the dough and proving the dough, as well as the importance of gluten and fermentation.



“My brother has to eat gluten-free bread,” said Priya.

“Oh yes,” said Rob, “many people eat gluten-free bread possibly because they have celiac disease or are sensitive to gluten, while others just prefer the taste. Gluten-free bread is as easy and as fun to make as bread which contains gluten.”



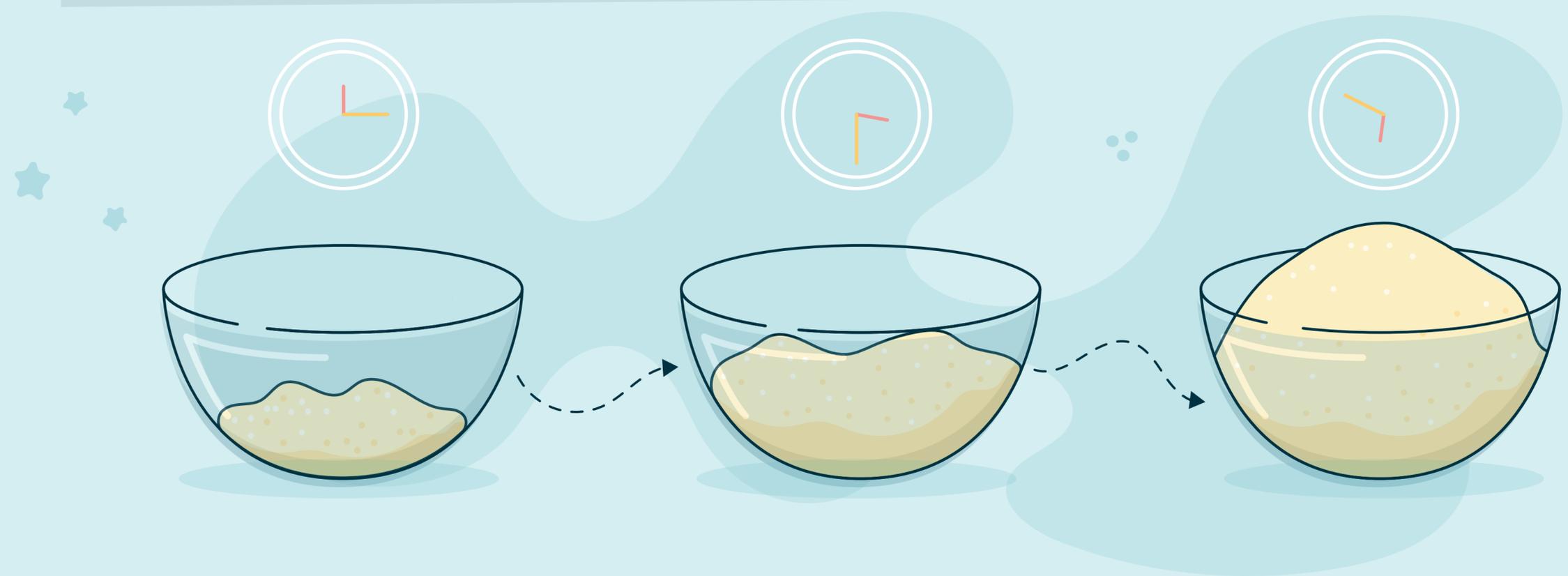


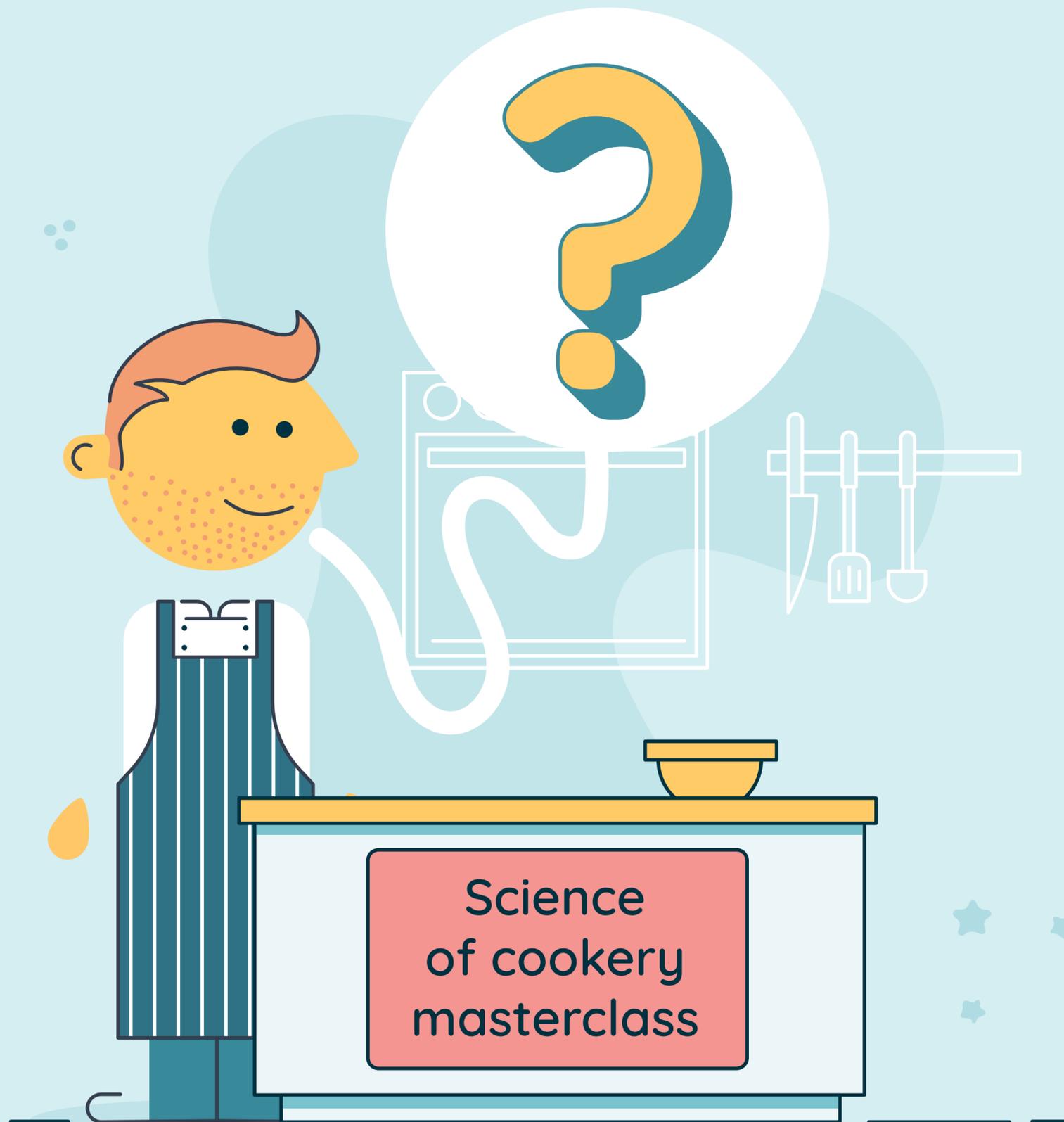
By now, Ellie, Priya and Susan had each had a go at kneading their dough, and since their hands were no longer so covered in flour and dough, Rob said it was time to stop and leave the dough to prove for at least 3 hours until tripled in size or, it could be left to prove slowly in the fridge overnight and then baked fresh in the morning.

To reward Ellie, Priya and Susan for their help, Rob offered them a selection of breads to taste.

“Yummy. Can I take an extra piece for my teddy, Mags, to try?” asked Ellie.

“Yes, of course”, was Rob’s reply, who went on to speak about the many different flavours and textures of bread - from natural sourdough, brioche, potato or flatbread to focaccia.





As the masterclass drew to a close, Rob had just enough time to leave the audience with some questions to go away and investigate:

“What effect do natural bacteria in the air, have on bread making?”

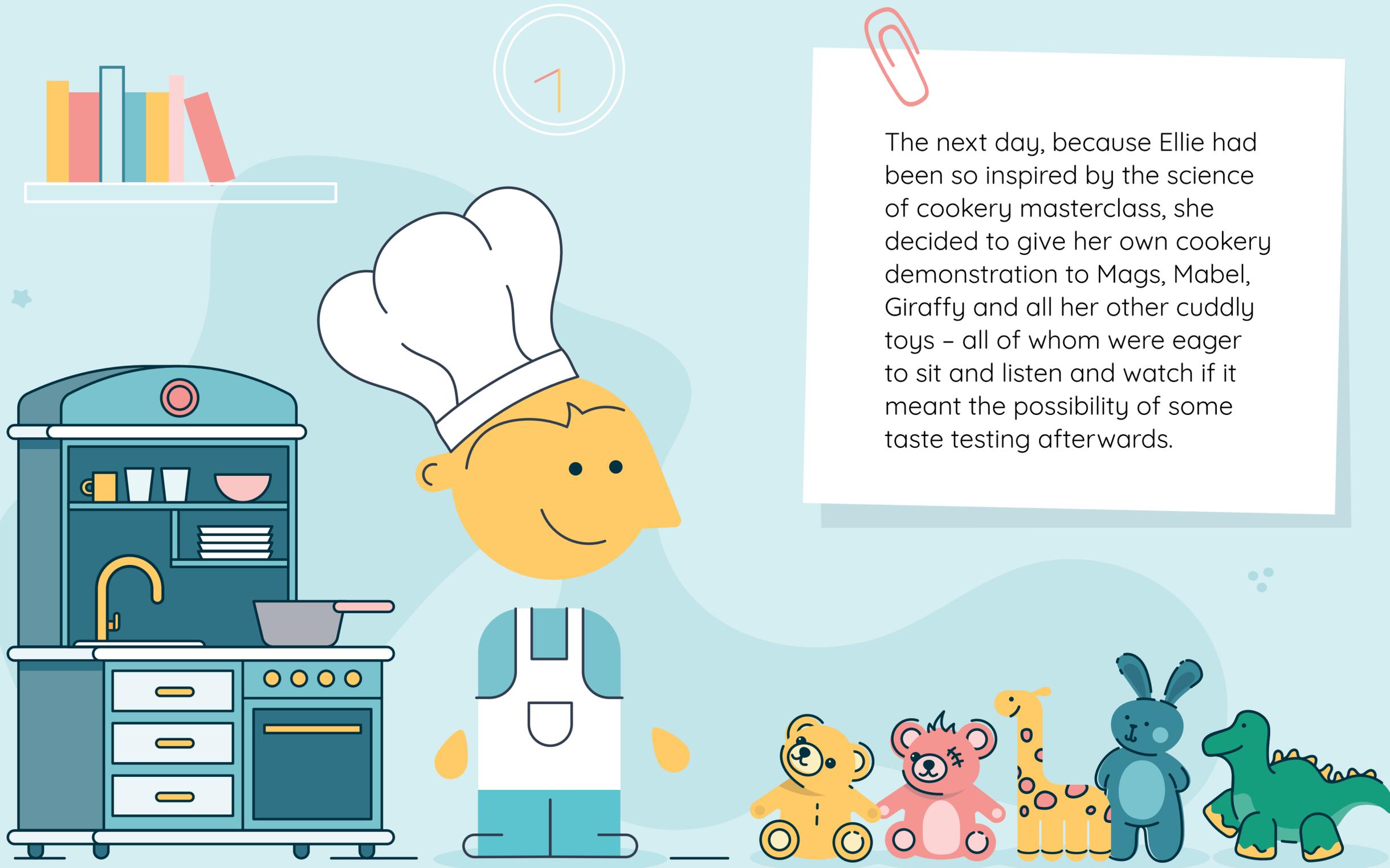
“How do baking powder and baking soda affect rise and texture in cakes or cookies when baking?”

Ellie and Priya agreed they’d had a wonderful time at the food festival and had been inspired both by the zero food waste demonstration and the fascinating science of cookery masterclass.

As they left the festival, Ellie and Priya had loads of questions for Susan and Kai, and they were clearly keen to investigate the questions Rob had posed at the end of the masterclass.

The adults could answer some of the questions, but certainly not all. Susan and Kai agreed they would help the children find the remaining answers when they arrived home.





The next day, because Ellie had been so inspired by the science of cookery masterclass, she decided to give her own cookery demonstration to Mags, Mabel, Giraffy and all her other cuddly toys - all of whom were eager to sit and listen and watch if it meant the possibility of some taste testing afterwards.



For more stories featuring Ellie,
her family, friends and teddies,
as well as accompanying
teaching resources, visit:
www.abpischools.org.uk



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