This resource is part of a suite of materials and activities created to inspire entrants, and support teachers, and parents to enter maths inside: a photo competition open to everyone in Scotland. maths inside: see different, make connections, celebrate!

In this series of example submission journeys, you can find details of searching, questioning, and discovery of maths inside the things and spaces around us! Follow these stories and learn how to catch the beauty of a discovery in a photo, title and commentary (linked activities and resource pack).

Visit mathsinside.com for entry details, further information, and follow us for updates!
Below, this example documents the submission journey for an Third/Fourth Level (S1-S3) entry (credits).

## Chances in Camping | Third/Fourth Level (S1-S3) example submission journey

Summer holidays for me are often camping trips. The first activity when we arrive is always putting up the tent. We take a task each and I was given poles. I, of course, jumped right in with no plan and ended up putting it up all wrong... This got me thinking: how likely was I to have put the poles in right by chance?

Well, for the first pole sleeve, I have 3 poles to pick from. In my excitement, I pick at random, what is the chance that I pick the right pole?


It's 1-in-3 which is 33\%. Unlikely to go in my favour... and that's why my tent looked like this:


My tent will probably fall in on me in the night! How can the chance of making this mistake be decreased? How can we reduce the need for uncertainty at all?

Poles have letter and colour codes!


You can match the orange pole marked "O" to the orange (O) pole sleeve, the green pole marked "G" to the green (G) sleeve, and the black pole marked "B" to the black (B) sleeve! Knowing which pole goes in which sleeve removes the decision making and means the chance of me building the tent right first time is $100 \%$ so I can get a proper night's rest!

For the photo competition, I took the photo below.


I chose the title

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    "The Chances in Camping"
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and explained in my commentary
"When I build my tent, I can follow the colour or letter code to make sure I do it right. Without the codes I would have to make decisions and increase the likelihood of making a mistake. I would pick between 3 poles meaning the chance of the putting up the tent wrong is high. The labels save me time on my holiday."

The picture is a bit messy with the bags and benches. Can you see how to make this photo better? What angle do you think it is best to take the photo? What do you want to be in the photo and what outside the photo? What is important to show? What will look better? I decided to take another photo. I changed the angle to frame the tent in the middle. I also got the colourful flowers that match the tent at the front left side and the tree and the back right side. I like my new picture more, I am going to submit it to the maths inside photo competition with my title and commentary above.


## further things to think about

What do you do in your summer holidays? Can you find the maths inside what you do?

Open to all ages with prizes in each level. You only need a mobile, the internet \& curiosity! Enter maths inside on your own or as a team, mind to add the maths inside sticker, and submit in one, or in as many categories as you like. The photo should be your own, without changes, and for a chance to win, cannot be shared anywhere else. View the T\&C for more information, and please do get in touch if you have any questions.

## linked activities and resource pack

Complementing each journey is an example interdisciplinary learning (IDL) activity matched to Curriculum for Excellence experiences and outcomes (Es\&Os). Also available are image banks containing images and questions to inspire interdisciplinary investigation and learning. These resources and activities are all available in a downloadable pack.

## credits

This suite of resources are the fruit of a collaborative project between undergraduate and postgraduate students from the University of Glasgow - School of Mathematics \& Statistics, Education Scotland, and Dr Andrew Wilson (maths inside Founder and Director).

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The photos above are credited to Megan Ruffle.

