

Wild Maths

explore ★ imagine ▲ experiment ◆ create



How could you cut up this card to make a hole big enough to walk through?

We'd love you to share how you try this - email us at wild@maths.org or post a comment on our website at wild.maths.org/hole

Maths is a creative subject. It involves spotting patterns, making connections, finding new ways of looking at things or using what you already know in new contexts. Creative mathematicians play around with examples, draw pictures, have the courage to experiment and ask good questions.

Wild Maths is a new collection of activities, developed by the NRICH team (nrich.maths.org), designed to give you the opportunity to explore your mathematical creativity. Explore our free games, activities and articles online:

wild.maths.org

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Information for parents and carers

Introduction:

The team behind the successful NRICH website (nrich.maths.org) is very excited to launch a new website, Wild Maths (wild.maths.org), aimed at young people aged 7-16, with a focus on Mathematical Creativity.

In this article, we outline everything we think you need to know as the parent or carer of a child using the Wild Maths site. Read on to find out what Wild is, who it's for, and how you might support your child as they delve into the exciting world of creative maths!

FAQ:

What is Wild?

Wild Maths is aimed at 7 – 16 year olds exploring maths beyond the classroom. The website aims to provide an environment where every child is free to roam and develop as a creative mathematician. We provide games, investigations, stories and spaces to explore where we know there are discoveries to be made. The activities have been designed to encourage your child to become more mathematically creative by making choices, developing their own ideas and using anything they like to help them.

What do you mean by 'mathematical creativity'?

Mathematics is a creative subject. G.H.Hardy famously wrote that 'A mathematician, like a painter or a poet, is a maker of patterns', while Einstein described mathematics as 'the poetry of logical ideas'.

Mathematical creativity involves spotting patterns, making connections, finding new ways of looking at things and using what you already know in new contexts. Creative mathematicians play around with examples, draw pictures, have the courage to experiment and ask good questions. The tasks on Wild have been designed to encourage your child to develop all of these aspects of their mathematical creativity.

Who is Wild for?

Wild is for any child or young person who is interested in exploring mathematics. It doesn't matter if your child is doing really well in maths at school or finding it a bit more tricky; if they are interested in exploring the activities and articles then it's for them. There is a wide range of activities available and so we hope your child will find something that appeals to them.

What will my child need to work on Wild?

You don't need lots of specialist equipment to get started on Wild, just lots of enthusiasm and determination. Your child will need pencil and paper for many of the activities and some include downloadable sheets for you to print. You may wish to provide your child with a calculator, scissors, coloured pens or pencils, dice, ruler

Some of the activities include video and/or interactive elements so it would be a good idea to make sure you are using a modern browser with Flash Player installed. The vast majority of the content of Wild should work on tablets and smart phones.

Where should my child start?

The site is divided into different thematic pathways. Within each, there are a variety of activities grouped into related areas. We think the best way to get started is for your child to explore the pathways until they see a task they'd like to try, and then to get stuck in! Within each pathway, the activities are connected, so if your child has enjoyed working on one activity, there are other related activities using similar mathematical ideas, but there's no need to work on the problems in a particular order. In fact, we would encourage your child to work on whatever takes their fancy, pose their own questions, and find their own journey through the site.

How can I support my child as they explore Wild?

The best way to support your child is by being positive and interested, so that they know you value their mathematical explorations. Some children may need help to read some of the text. Encourage your child to have a go at whatever takes their fancy. Even if they think an activity might be designed for younger children, if they want to explore it then they can! Many of the activities contain open questions or have ideas that students can follow up on at a higher level, so even if the initial task is on the easy side, there'll be something for them to get their teeth into.

Try not to do the maths for them, instead you might find the following general questions or prompts useful if they are stuck:

- Tell me about what you've done so far.
- What do you already know?
- Have you come across anything like this before?
- What do you/we need to find out?
- What could you/we do next?
- How are you keeping track of what you have done?

Being stuck is nothing to be ashamed of, as it is in getting 'unstuck' that we learn. Part of developing into a creative mathematician is about having some strategies at your fingertips for finding a way forward, so encourage your child to try to persevere. Having a break away from the task can sometimes help the creative process!

When they have worked on a task and are pleased and proud of what they've done, encourage them to send in a picture of their work, a write-up of what they've done, a video, or whatever takes their fancy. They don't need to have a complete solution, and in fact for some of the more open problems it might not be possible to completely solve every question, so do encourage your child to send in a response even if they didn't get as far as they wanted.

How will my child know whether their answers are correct?

On Wild, we value much more than just answers. Instead, we are more interested in the way that your child tackles an activity. Some of the activities on Wild are very open, which means that your child may not be exploring the same question as another child, even though they started at the same point.

Your child can seek feedback on their thoughts and discoveries from other users of Wild, and from us, by posting comments on the appropriate page. Encourage them to give details about the way they approached the activity in their comments so that others can gain as much insight as possible into what they have done so far.

Can I try the problems too?

Of course! If you see an activity that catches your interest and imagination, why not get stuck in and have a go? It would be great for your child to see you getting excited about one of the resources, and of course it would put you in a position to talk with your child about how you approached the activity and what mathematical thinking you did. We're unlikely to publish responses from adults on the site, as our target audience is 7-16 year olds, but we'd be interested in submissions that parents and children worked on together, and even if we can't publish your feedback we'd still be very interested to hear what you think of the site.

Now that you know all about Wild Maths, why not sit down with your child and find out just how creative Maths can be? Start exploring at:

wild.maths.org