



MATHSWORLDDUK®



## Creating the UK's first national mathematics discovery centre

Version 1.0  
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# Who we are

MathsWorldUK (Registered Charity 1155010) is working to create a world-class mathematics discovery centre for the UK - a major new attraction sparking public excitement, curiosity and engagement with the wonders of maths.

The project combines best practice from trail-blazing maths discovery centres around the world with ingenious ideas from Britain's own leading mathematicians, academics and innovators. Many are already project ambassadors, signed up to our vision that children and families of all ages, backgrounds and abilities should access the joy, beauty and power of mathematics.

*"Mathematics... is the best game that has ever been invented. It beats Monopoly, it beats chess and it happens that it can enable you to land rockets on the moon."*

Sir John Kingman, British mathematician



# Why do we need a mathematics discovery centre?

Many people in the UK have negative attitudes to mathematics and lack confidence in their own mathematical ability. This has negative consequences for the individual and the country.

- Maths skills, confidence, and qualifications are key to social mobility.
- Poor maths skills can lead to problems with debt and mental health.
- Maths is the gateway to STEM careers and other lucrative careers.

MathsWorldUK is changing perceptions...

*“The attainment gap between children eligible for free school meals and their peers is equivalent to one whole maths GCSE grade.”*

The Educational Policy Institute Report, April 2018  
Educational Disadvantage: How does England compare?



# What some of our ambassadors say...



Prof Sir David Spiegelhalter OBE, FRS  
The University of Cambridge

*"People when they see numbers or they see maths, .. they just get nervous ... Its trying to get people away from that pressured maths environment to seeing that maths can be fun, playful and joyful."*



Bobby Seagull  
Maths teacher, broadcaster and writer

*"I want to improve the quality of the discussion of the numbers in the news."*



Dr Hannah Fry  
Lecturer in Mathematics of Cities,  
University College, London

*"There is this real appetite for the playful, joyful side of mathematics.... I think that anything that really reveals just how engaging and counter intuitive, and surprising it can be as a subject is always a good thing."*



# Our goals

MathsWorldUK aims to transform the UK public's perception of mathematics - revealing the engaging, aesthetic and surprising side of maths and empowering people to explore mathematics for themselves.

## Our aim is to:

- To **create an outstanding visitor attraction** that presents maths as playful, exciting, relevant and accessible
- To **welcome 150,000+ visitors each year (children, families, school groups)** from diverse economic, social and cultural backgrounds – inspiring them to discover, explore and enjoy mathematical thinking and ideas
- To **build young people's skills, confidence and interest in mathematics** and their desire to learn more – particularly among those who face the greatest barriers to engaging with maths
- To **explode negative perceptions of mathematics** – among young people and the parents, carers and teachers who influence their career choices
- To **secure a stable and financially resilient future** for the new attraction, with no long-term reliance on public subsidy



# Our strategy

Our strategy has been to build content incrementally across successive themes, drawing on Britain's leading experts at every stage and testing ideas and interactive challenges with children, young people and their families. Through this process we are building momentum, engagement, expertise, audiences and advocacy.

*big data design and engineering chance and risk **medical mathematics** artificial intelligence **awesome numbers** pandemic maths code breaking big data **programming** chance and risk waves and bubbles **artificial intelligence** awesome numbers pandemic maths **code breaking** big data design and engineering waves, fluids and bubbles artificial intelligence **pandemic maths** code breaking big data **design and engineering** chance and risk waves and bubbles **form and geometry** awesome numbers pandemic maths code breaking **big data** design and engineering chance and risk waves and bubbles **logic and problem solving** awesome numbers form and geometry pandemic maths code breaking big data and more...*





Phase 1: MathsCity - A test bed for ideas



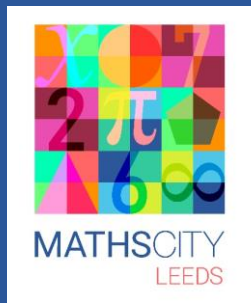
# MathsCity Leeds - The journey

In late 2021, we launched MathsCity Leeds in a retail unit in Trinity Leeds. Designed as proof of concept, it acts as a hub for dialogue and content development.



**Secured seed funding and a great location**

Trinity Leeds is a retail and leisure complex in the centre of Leeds. Due to our charitable status we were able to secure a 290 m2 unit rent free.



**Created a brand**

We commissioned brand consultants to develop a distinctive and attractive visual identity.



**Began operations, marketing and sales**

We developed a marketing strategy to include a website, social media and advertising.

We purchased an on-line booking and ticketing system.



**Built the experience**

Our first set of test exhibits were installed along with graphics and signage.



**Recruited staff and volunteers**

Our high calibre team were trained in the MathsCity way.



**Opened Sept' 2021**

Following our VIP launch event we opened to the general public.

**In our first year we had more than 11,500 visitors**





# MathsCity Leeds - The journey

The work continued.



## Schools and Education

We developed school workshops and took MathsCity out to schools with in-school code breaking events

2826 school children have visited so far!



## Socio Economic Outreach & Engagement

Targeted groups from less-advantaged areas of Leeds

Tailored experiences

400 free tickets for 10 schools and 900 free family tickets.



## Spreading the word

Our CEO and trustees presented at educational conferences (such as the International Society for Design and Development in Education conference, Nottingham) and did online and media appearances.



## Changing perceptions

Independent evaluation of MathsCity Leeds visitors has demonstrated increased enjoyment and interest in maths.



## Prototyping ideas

We are developing new themes for the national mathematics discovery centre such as Planet Earth, Codebreaking, and Design and Engineering



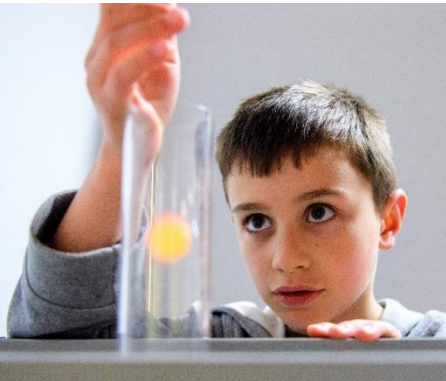
## Raising capital

With proof of concept and widespread support, our focus is now shifting to major fundraising.

**We have welcomed 21,000 visitors so far...**



# MathsCity Leeds - Changing perceptions







# MATHSWORLD

The UK's first national mathematics discovery centre

# Developing our themes

The national mathematics discovery centre will have 11 permanent zones and one space for temporary exhibitions. The themes of each zone represent the areas where mathematics plays a key role.



Design & Engineering



Code Breaking



Problem Solving



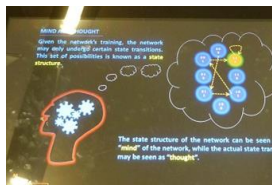
Shape



Number



Under 8's



Digital and Ai



Medical Research



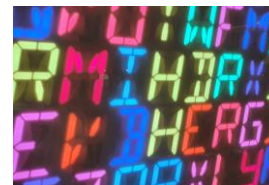
Planet Earth



Outer Space



Chance and Risk



Temporary



# Call to action

## The time is right to accelerate progress towards the national mathematics discovery centre

MathsWorldUK is ready to press ahead with delivery. The total cost of creating MATHSWORLD is £11M which we expect to source from a combination of public funds (target £7M); major grants (target £2M from leading trusts); private funds (target £2M) and partner contributions. Major donors are willing to invest: £1.3M is already pledged in private funds. What is needed now is for local and national government to step up with tangible support and public investment, creating the confidence and conditions for this vision to be realised.

### For more information please contact:

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MathsWorldUK is registered in England and Wales as a charity (number 1155010) and a company (number 8370409) and whose registered office address is at Stringer House, 34 Lupton Street, Leeds LS10 2QW

