

39 We're Stuck! 1239

OUR REACH

(we think these people came across us)

Charitable



11

it was brilliant I mean BRILLIANT"

Child's comment

FANTASTIC!"

Teacher comment

AUDIENCE ENCOUNTERS

603 DIRECT

were supported by people we trained)

attended.

Thanks to... Man Charitable Trust, John Lyon's Charity, Pancras Square Library, London South East Maths Hub, National

Numeracy and our many other partners, supporters, donors and volunteers.

FAMILIES ENCOUNTERED

117 DIRECT (we met them!)

were supported by people we trained)

// Loads of laughing and nice chat + good

maths conversation about shapes :)"

Parent's comment

TEACHER

triangles



attended sessions at conferences and events, or part of our training programme

> been involved by those teachers this year



WWW.MATHS ON TOAST.ORG.UK INFO@MATHS ON TOAST.ORG.UK

Contents

FROM OUR LEADERSHIP						
From the Trustees						
Theory of Change	5					
From the Chief Executive	6					
OUR OFFER: Community Maths Events in Camden						
ntroducing Community Maths	9					
Maths Mashup - our Regular Camden Event Outcome 1 - Enjoyment						
						Outcome 2 - Social Bonding and Bridging
Outcome 3 - Remembering, and Doing More Maths Afterwards	14					
OUR OFFER: Community Maths in Schools						
Why Work With Schools?	16					
What Schools did we Work With?	17					
Festival of Triangles - Now Available in Kit Form	18					
OUR OFFER: Family Maths at Home						
Number Rumbler!	20					
Also Spotted in the Classroom	21					
Number Rumbler on Tour	22					
New Versions on the Way	23					

OUR OFFER: Creative Collaborations	
Why Collaborate?	25
We're Stuck! Maths and Theatre	28
OUR OFFER: Online	
Spreading the Love	28
OUR TEAM	
Trustees	30
Staff	31
FINANCIAL STATEMENTS	
Statement of Board of Trustees' Responsibilities	33
Independent Examiner's Report to the Members of	
Maths on Toast ('the Company')	34
Statement of Financial Activities	35
Balance Sheet	36
Notes to the Financial Statements	37

From the Trustees

Have you ever had "a feeling of tension and anxiety that interferes with the manipulation of numbers and the solving of mathematical problems in... ordinary life and academic situations"? That's how Richardson and Suinn described mathematics anxiety in their paper on the subject in 1972. It is beyond doubt that many in the UK struggle with this feeling today.

Yet as Mike Ellicock, CEO of National Numeracy, said recently, "It is 90% attitudes and 10% skills, yet almost all resources are just about the skills." Maths on Toast is unique amongst maths education charities, because we are using creative content - much of it with crossovers to art, craft, and the Arts - to foster positive, social experiences of maths. Our audiences enjoy doing creative maths together, as part of their family or social life, and because they know it's maths they are doing (we make sure of that!) they develop positive memories of the subject, and the positive attitudes which will support their ongoing learning.

It sounds simple - and in many ways it is.
For example, if we were working in literacy, not numeracy, we wouldn't be unique. There are hundreds of charities doing great work supporting families' enjoyment of reading and

Man

Charitable Trust

WWW.MATHS ON TOAST.ORG.UK
INFO@MATHS ON TOAST.ORG.UK



writing: reading mentors, story times, libraries, performance groups, and more.

Yet we are the only charity doing this for maths. Not only that: most people wouldn't even imagine that this could be done for maths.

This year, our fifth, has been one of steady work to build stable foundations, but it has also been one of increased determination. At our Strategy Day we set an ambition: to become the go-to place for family maths in the UK. Given most people in the UK don't even know family maths could exist, that's an enormous task. But since that setting

of our ambition, we have made strides. We have raised funds to recruit our first full-time employee, Marketing and Operations Manager Hannah Gatward, who joined us in December – and we have moved offices. This is more than a doubling of our capacity and will also free up our CEO, Alexandra Fitzsimmons to seek new opportunities, while Hannah works to extend and sustain our existing activities. The team continues to be ably supported by our event leader Francesca Piacentini and our many volunteers.

This year has also seen the government announcement of a national multiplication

check for children in Year 4 (8-9 years) from 2019-20, which brings with it school and family pressures to ensure children have secure multiplication and division facts. Fortunately, Maths on Toast has already developed its game 'Number Rumbler' to support making that an enjoyable and enriching experience. More about this later in the report!

Please enjoy this report on our 2016-17 year. If you were part of helping us to achieve what's in here, please take pride in that: we're making real change.

Theory of Change

WWW.MATHS ON TOAST.ORG.UK
INFO@MATHS ON TOAST.ORG.UK

The Need

MATHS IS A CORE SCHOOL SUBJECT AND NUMERACY IS LINKED TO LIFE CHANCES (1). OUR ECONOMY AND SOCIETY NEED MATHEMATICALLY LITERATE PEOPLE. YET NEGATIVE ATTITIOUES TO MATHS PREVAIL IN THE UK, FROM "I CAN'T DO MATHS" AS AN (IMITATED AND INHERITED) FACET OF IDENTITY TO MATHEMATICALLY DISABLING 'MATHS ANXIETY' (2).

VISION

WE WANT EVERYONE TO FEEL POSITIVE ABOUT MATHS - TO FEEL THAT IT IS SOMETHING THEY CAN DO, AND ENJOY.

Enjoy doing maths together and be aware that it is maths that they are enjoying

Engage in mathematical activities, showing concentration, play and perserverence

MISSION

TO MAKE MATHS A CREATIVE, ENJOYABLE, HUMAN, SOCIAL ACTIVITY FOR FAMILIES AND COMMUNITIES

People taking part in our activities will...

Be supportive of others' mathematical learning

Increase their enthusiasm for maths, reduce any fear of it - and do more, afterwards Have positive, shared family memories of mathematics

Increase their confidence in maths, seeing it as something they can do

MODEL

WE RUN EVENTS, DEVELOP
ACTIVITY AND PRODUCT IDEAS
AND WORK IN PARTNERSHIP TO
CREATE FUN, MEANINGFUL
AND IMPACTFUL WAYS OF
ENGAGING WITH
MATHS.

Broaden their view of what and where maths is

Interact with a broad section of the community and become more aware of the opportunities maths opens up to them

From the Chief Executive

HOW DO YOU FEEL ABOUT MATHS?

For me, this will always be the year I first asked a group of primary school teachers for their best, and worst, memories of maths. Try asking yourself that question - what comes to the fore? For many people, the bad memories are of fear, discomfort, panic or embarrassment. It's times tables questions being fired at you, not understanding what a teacher is saying, being certain that you are stupider than the rest of your class.

Of course, people do have good memories too. For the teachers I met, many of these came from their professional experience - realising that maths could be explained in many ways; finally understanding something that had eluded them as a child. Those 'got it' moments came up in childhood recollections too, of course. And a few people told me about someone in their life who introduced them to a different side of maths - a parent, an aunt, a family friend, or a teacher.

Most of the people I have spoken to, though, have been, broadly speaking, positive about maths - they have volunteered to come to my conference session, after all. What about the people who have not got to that positive place?



It's that group who we are increasingly aware are avoiding maths - and likely to be doing less well in life because of it. Although there's something in Maths on Toast's offer for every family, it's the ones where parents or children feel most negatively who we believe can benefit most from our work.

OUR WORK THIS YEAR

While we've dwelt on the emotions swirling around maths, our activity as a charity has become more practical, more organised and more rational. We have spent time making sure our IT and finance systems are functional, listening to our audiences and understanding

their needs, and working to reduce some risks that may be acceptable in a start-up but just aren't appropriate longer term. Our income actually dropped slightly, representing a levelling out of capacity (which we have, since the year end, countered with a generous new grant from a major funder, resulting in the



It is called maths on toast because maths is like butter so you can spread it"

Child's comment, Public event

employment of our first full time employee.) But this rationalisation has not been without triumphant moments! Chief amongst these was the final development of Festival of Triangles, our community event for schools, into a format where teachers can run it without our support. This was achieved by working with a cohort of five schools, and in partnership with the London South East Maths Hub. Schools can now buy a 'kit' to run Festival of Triangles themselves. We can still offer schools support on the day of an event - or even a full professional development package! - but the 'kit' option is more affordable and more cost-effective, and will allow us to reach schools well beyond London. This packaging is the first buildingblock to scaling this part of our activity in a sustainable way.

Meanwhile, theatrical collaboration We're Stuck! went on tour again, our card game, Number Rumbler, continued to sell well, our regular activity in Camden flourished, and a number of other projects lent energy to our year.

COMING UP NEXT YEAR

At our Strategy Day in the summer, the Board set out an ambition to become the 'go-to place for family maths' in the UK. Secretly, perhaps that's been our ambition all along. The difference now is that it's an ambition that we can rationally seek to achieve, because we have two scalable products, so as our reach grows, so can our income.

But let's return to where I started - those strong negative memories of maths that are stopping people enjoying it and even attempting it. Not everyone in the UK even believes in the existence of family maths. That makes our ambition, again as it's always been, not only to become more well known, but to change people's assumptions.

That defines our aims for next year. It's already led to some systematic work on our audience model and overall strategy, to some serious fundraising, and to the appointment of our first full time employee. Getting our message out has always been important - but it's never seemed so achievable.



Introducing Community Maths

Public, free family maths events are, and always have been, at the heart of Maths on Toast's work. Our community events provide families with an opportunity to do maths, for fun, in their leisure time. For the families we describe as 'maths fan families', our events are valuable as a source of ideas and inspiration. For those who aren't so confident about maths, the events can do much more, opening up new possibilities. They can offer a chance to feel positive about a subject that may be causing anything from nervousness, to anxiety, to outright fear.

We monitor attendance at our events closely, including checking how recently new visitors have done maths for fun as a family. For a significant proportion, this is the first time ever, or in a very long while. We also ask families how they found the events and activities - refining them in response. This year, we are now able to track whether families return.

Of course, the events are also a chance to be out and about as a family and with other families, with all the family bonding and community 'bridging' that arises from that. So we also ask families if they felt it was good bonding time, and check that a diverse group attends the events.











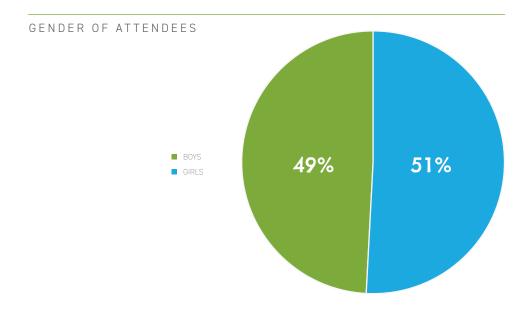


Maths Mashup - Our Regular Camden Event

Our community events in Camden continued to be funded as part of our 3-year funding agreement with John Lyon's Charity.

Activities included making decorations, playing games, inventing games, detective work with codes, measuring and inventing measuring units, and more. We ran twelve events in Pancras Square Library (one per month). 110 families attended, and 18 of these families came back for more - making 64 repeat visits in total.

We also visited three organisations where we felt we might encounter families, or children, who were unlikely to make our regular events. The Winch's mission is to help children, young people and families across North Camden improve their chances in life. Camden Futures is a project run by the Elfrida Rathbone Centre, aimed at families who have significant needs. Great Ormond Streeet Hospital needs no introduction.



I liked the event when we made the Ancient Chinese times tables scroll because it looks amazing."

Child's comment

11

OUTCOME 1

Enjoyment

Families enjoy the event, and recognise that it is maths that they have enngaged in.

91% of commenters enjoyed the activities or enjoyed them a lot (86

responses) and...

were clear that it was **88%** were cl maths.

> groups reported spending an hour or more at the event.

"Really fun and interesting | **∀** it! :)"

Child's comment

"I liked the event because it was learning, but fun learning."

Child's comment













OUTCOME 2

Social Bonding and Bridging

Our audiences are diverse, both in terms of ethnicity and in terms of prior exposure to family maths. They interact with each other sociably, while doing maths. Over half of those who commented on our events felt they had spent time with other families during the session. Other comments showed that family bonding was also important.

FAMILIES' STATED ETHNICITY ■ NOT STATED ■ BRITISH WHITE BRITISH ■ BRITISH MIXED AFRICAN (included Somali, Black African, Eritrean) ■ EUROPEAN (included Italian, European) ■ SOUTH ASIAN (included Bangladeshi, Indian) ■ EAST ASIAN (included Chinese, Japanese) ■ USA/AUSTRALIAN

"Enjoyed getting absorbed in the task together."

Adult's comment

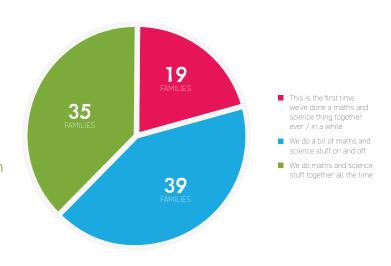
"Making times table grids with my kids."

Adult's comment

"I think the event was really fun because we got to spend time as a family and we got to try new things."

Child's comment

HAD FAMILIES DONE FAMILY MATHS BEFORE?





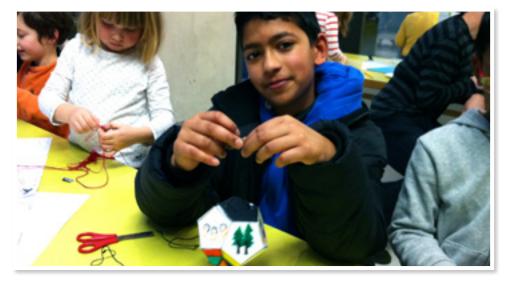
OUTCOME 3

Remembering, and Doing More Maths Afterwards

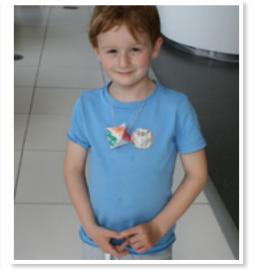
Our audiences take home positive memories of maths, souvenirs of our events, and tell us they intend to do more in the time that follows. Some return to our monthly events, making it part of their routine.

families returned to our events. Of those...

families came to three or more events.









"Buy a compass and do
more of these drawings
(spirals + circles) at
home for fun!"

Adult's comment - intentions following the event

"Will definitely come again + will play with triangles in between"

Adult's comment - intentions following the event

"In between events we visited Bletchley, Gun Power Mills, bought a Maths on Toast pack of cards."

Adult's comment



Why Work With Schools?

We're the 'family maths charity' - so why do we work with schools? In fact, collaboration with schools is vital to Maths on Toast's work.

One reason is that every family with children aged 5+ in the UK already has a school they feel a connection to. Also, families who aren't instinctively excited about maths are much more likely to come to an event at their child's school - a familiar, local environment - than they are to one of our public events. We can even, potentially, target schools that have a particular social demographic.

Another reason that working with schools is important is teachers can build on the ideas sparked at one of our community maths events in a way that, with a one-off encounter,

we cannot. Because of the potential depth and impact this brings, this year we have transformed the way we work with schools. Our school event, Festival of Triangles, used to be an 'enrichment' activity, something we delivered at school premises as an 'extra' to the classroom teaching. It is now, after the collaborative project described below, a teacher-led intervention. We supply a 'kit' which supports a member of staff to deliver a creative maths week that includes an event to which parents are also invited. We can also supply professional development to support the staff further in this. Because the teacher is empowered to lead this event, rather than seeing it as an external 'extra', we believe there is much greater potential for a much more lasting impact on the children and their families.







What Schools did we Work With?

We worked directly with seven schools during 2016-17. All were state primary schools in London with diverse communities. One indicator of poverty or wealth in a school community is the proportion of children who are eligible for free school meals, a nationally recorded statistic. We're pleased that during 2016-17, the average (mean) eligibility for free school meals in the schools we worked with was 15.3%, above the national average of 14% (DNS, 19 June 2017). In fact, all but two of the schools where we held events had free school meal populations above that average. We also worked with one Hospital School.

"Every child in the school has made a straw tetrahedron. And I think that's a realy nice thing. It's nice for our younger children to feel on a par with our older children."

Teacher Comment

"I was so inspired by what I saw during your workshop, that I am keen to share the message." "

Teacher Comment



Out and about in London, Stratford and Chelmsford

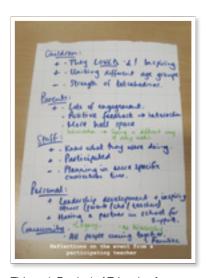
We also met teachers at a series of conferences and conference workshop sessions. In particular, our CEO presented two sessions at the Association of Teachers of Mathematics conference, one about Festival of Triangles and one (in collaboration with theatre producer China Plate) about our theatre production. We're Stuck! One teacher who met us at the Learning Works conference was so impressed that she went on to showcase our activities at an event for teachers in Chelmsford.







Festival of Triangles - Now Available in Kit Form



Festival of Triangles is a whole-school community maths event, couched in a week of triangle-themed maths teaching. We see it as the equivalent of a school concert, play or sports day for maths a celebration of the subject to which everyone is invited.

A major part of our work this year was a collaborative Research & Development project with the London South East Maths Hub.

This took Festival of Triangles from a straightforward 'enrichment' project, which our team delivered for a school, to something that a teacher could deliver without our direct support. The value of this is twofold: firstly, it means we can reach many more people, but perhaps more importantly, teacher ownership of the Festival of Triangles event means it can have a much greater and more lasting impact for the school community.

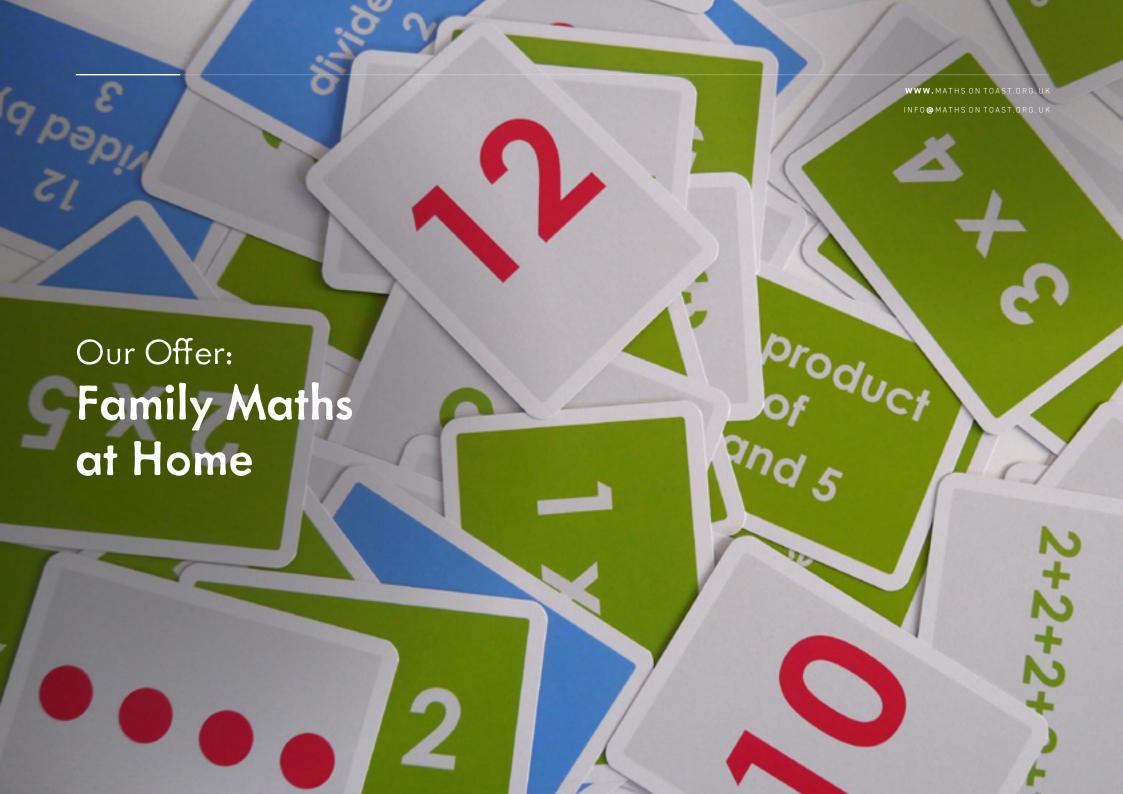
During the project, we worked with five primary schools in Southwark. Two teachers from each school attended a series of professional development sessions and then delivered a Festival of Triangles event in their own school.

As a conclusion to the project, we presented the teachers' experiences to a group of ten more teachers from schools in the Southwark area, sharing the learning and spreading the word.



"We had quite a lot of groups of parents and children working on the tetrahedrons, and when they put them together to make the even larger tetrahedron, there was a frenzy of excitement amongst all the children, and even some of the parents, when they saw what we were aiming for. "

Teacher Comment



Number Rumbler!

"Fab game! We love it in this house, young and old!"

Amazon Review

"Have just been at a 'number rumbler' event watching children and parents really engage with this game.

Such a good focus for some family fun. You can play the suggested games - or make up your own!"

Amazon Review

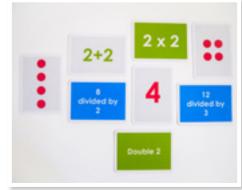
Number Rumbler is the family maths game which we developed in 2014 in collaboration with families. It's designed to be first and foremost a fun game to learn multiplication and division facts, and it can be played in lots of different ways, including both a speedy and a slower-paced game. This flexibility takes the pressure off, and allows an exploration of the numbers rather than echoing any sense of being tested at speed, something which for some is intimidating. The structure of the game also supports number sense, giving players a deeper understanding of number than can be achieved through rote learning alone.

We now sell the game on Amazon (where it has 4.7 stars), in the Bletchley Park shop, and through education resellers Autopress Education and Cambridge House. Number Rumbler was a Finalist in the Science Toy Award 2016.

We sold 934 copies of the game on Amazon, 250 through educational suppliers and 50 through the museum shop at Bletchley Park, a total of 1234 copies during the year. We also raised funds, right at the end of the year, to send 50 packs to educationally disadvantaged children in South Africa. We are looking forward to finding out how they get on with the game!







Also Spotted in the Classroom...

Teachers wrote and tweeted to us to tell us how they got on with the game. And Year 6 at Lings Primary School wrote a whole blog post about playing Number Rumbler.

""I used the Number Rumbler cards with my Reception class, mainly focusing on matching quantities/objects to a numeral and seeing how the amount can be represented in different ways. We also thought about estimating first when selecting the dot cards, so picking smaller amounts for smaller numbers and then checking by counting. One boy noticed from the array that "3 and 3 is 6". The group also noticed 6 can be turned around to make 9 without any prompting from me."

Reception class teacher



Number Rumbler on Tour

During Autumn 2017, we took Number Rumbler on tour. We visited a Fun Palace (in Herne Hill), a street festival (in Bermondsey), a local library (in Putney) and a school Christmas fair (in Roehampton), playing the game with 96 people in total. We've also played the game at our community events in Camden.



New Versions on the Way

Comments from families showed us that there's demand for both a younger children's version and an older children's version of Number Rumbler. We started work on the younger version in the summer - and the older children's one will follow soon...

"My kids enjoyed the game and were keen to play again which is a good sign. However, it really only has a small portion of the times tables in, 2's, 3's and 4's-and not all of those. So whilst it is a fun game and good for making the links between the same sum in different formats it wasn't quite what I wanted-we need practice with 6-12 X tables most of all."

Amazon Review

Picking up our Prize

Number Rumbler was a Finalist in the Science Toy Award 2016. In October, Trustees Reena O'Neill and Sophie Smith attended a glamorous ceremony at Imperial College London to collect our plaque.

"I bough a pack of these card on
Kickstarter so have kept an eye on this
from the beginning. Its a lot of fun, but
its all about mental maths – a tricky
combination! Love the mixture of visual
and numeric, and love that there are
at least two different ways to play the
game. Fun, interactive and competitive
– a great combo. And again, completely
gender neutral"

Laurie Winkless, member of the 2016 Science Toy Award expert jury panel





Why Collaborate?

Maths on Toast's collaboration with theatre maker Sarah Punshon and theatre production company China Plate is a great illustration of how collaboration can help us. We are not only meeting the need for creative, fun, social maths activities that families can take part in together, but we're also engaging in the real conversations on the emotional issues that many people are struggling to deal with when doing maths.

The project arose because we wanted to address what we saw as a social myth: that getting stuck in maths is a bad thing, and indicates that you are stupid, or have reached your mathematical 'limit'. Any professional mathematician will tell you that they get stuck all the time - but that's not well known. We were looking for a way to have that emotionally deep conversation with our audiences. So when we were approached by Sarah, we jumped at the opportunity to collaborate.

Not only did working with a theatre maker allow us to explore emotional issues in a different way - it opened up new audiences too. And as the project grew, working in partnership with China Plate meant that the project had much greater reach than we, a new small charity, could have achieved on our own.

Of course, theatre hasn't been our only partnership in 2016-17. Working with heritage organisations has allowed us to support the telling of mathematical stories in all sorts of other, unexpected, contexts. And working with National Numeracy helped us to spread the word even further about what we do

Museum and Heritage Projects

Maths on Toast also worked with the Petrie Museum and with English Heritage, discovering and integrating the mathematical elements of a half term activity about spies and a permanent interactive about the way monks managed their finances.

Maths on Toast's work also featured in new book The Art of Relevance, by museum director Nina K Simon

800 our competition

Number Superheroes Maths on Toast also worked with Maths on Toast worked with National Numeracy to develop a children's competition to 'design a Number Superhero'. At the closing date in September 2017, there were around 800 entries - showing great imagination about what a number superhero might look like.

We're Stuck! Maths and Theatre

We're Stuck! is an interactive theatrical adventure for children aged 8-11 and their accompanying adults. At 70 minutes long, it takes audiences through six different spaces as they explore "Volcano Industries", a topsecret Artificial Intelligence research facility that develops cutting-edge robots controlled by neuron-computer hybrid systems. The audience are cast as "Professors", who have to help "Dr Dikita Dey", "Dr Bernard Fenugreek" and "Dr Ernest Volcano" overcome the evil plans of the head of the institute, "Dr Astrid Volcano". As the show progresses, the audience of Professors not only get stuck on, and solve, mathematical problems together, but also support Dr Ernest Volcano to overcome his own fear of maths, which is based in his belief in his own low ability.

We developed the show in 2014-15 with theatre-maker Sarah Punshon and a team of scientific, mathematical and creative collaborators. In 2015-16, theatre production company China Plate joined the team, raising funds for a tour of the show - and we raised funds for a parallel project to produce a souvenir activity book full of mathematical activities for audience members. In 2016-17 China Plate secured

an extension grant from the Wellcome Trust and a Grants for the Arts grant from **Arts Council** England to tour the show for a second time in spring 2017. This second

1239 people came to shows. people came to Q&A sessions in total

tour sought to expand audience engagement in target locations with areas of high social deprivation and low arts engagement. China Plate also partnered with Shoreditch Town Hall to take the show out into community centres in Hackney as a means of directly engaging this target audience, particularly those who rarely get to the theatre.

Over 39 performances, the show reached an audience of 1239. Approximately 90 participants came to Q&A sessions with scientists and mathematicians who had contributed to the project, a deeper level of engagement. China Plate estimated that they reached a secondary audience of approx. 21,000 people through the dissemination of interviews and press activity around the show.

"The children loved realising that maths/science/real life are all linked together."

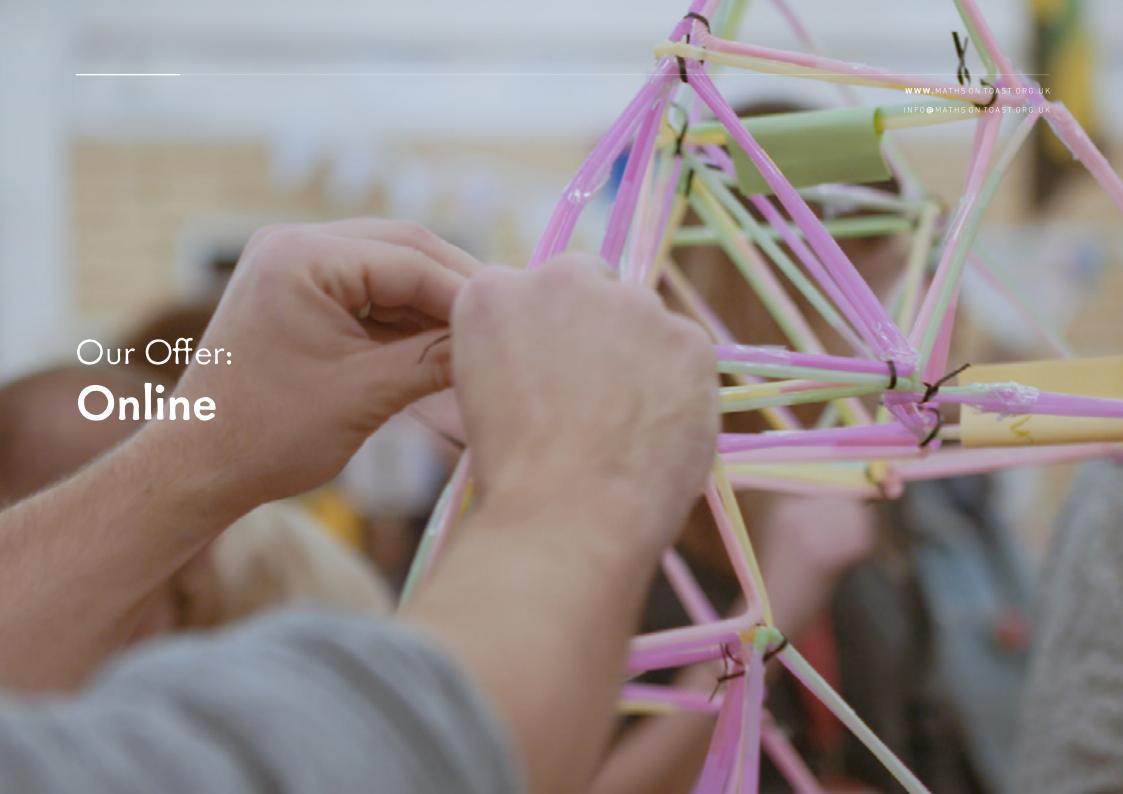
Teacher's Comment

"I loved the message about how getting stuck and making mistakes is an essential part of learning.

Babes About Town

The whole thing was a great experience from start to finish, including the sets, and we both had a fantastic time, with a workbook to take home with us!"

Parent's comment



Spreading the Love



Maths on Toast's website, Facebook page and Twitter feed are another place where we can connect with our audiences, finding out what's of interest and understanding the need for our work. We also use our web presence to spread the word about what we do. Thanks to the efforts of our volunteer Anna Carnegie, our Facebook page and Twitter following have both grown significantly in 2016-17.

Our top most shared stories online were about myths around maths ability - for example, The Myth of I'm Bad at Math (Kimball and Smith, The Atlantic, 2013) and How to Raise Your Children to Love Maths Even If You Don't (Hosie, The Independent,

2017). We also heard from teachers who had used Number Rumbler in the classroom.

Though most families who discover us still find out about us through their schools, libraries and connections, families also heard about our public events online - particularly through the newsletter Hoop.

And in the News...

We featured in other organisations' blog posts through the year. National Numeracy's Sue Skyrme wrote a piece about our Festival of Triangles. The School Run featured Number Rumbler in its roundup of family maths toys and games.



INFO@MATHS ON TOAST.ORG.UK



Trustees

DR ALISON CLARK-WILSON is a former secondary school mathematics teacher who now works as a Principal Research Associate within UCL Institute of Education. Alison is a Trustee of the Association of Teachers of Mathematics and a Fellow of the Institute of Mathematics and its Applications. She currently serves as an elected member of the Executive Committee for the British Society for the Learning of Mathematics.

REBECCA MCCAFFRY is a Fellow of the Chartered Institute of Management Accountants, where she leads their public sector research programme. She has a particular interest in helping finance professionals work more effectively with their nonfinancial colleagues.

HOLLY McGIVERN is an experienced people and budget manager. She works for a Central London Council, where her specialisms include social housing and systems thinking. Her previous work tackling overcrowding in council tenancies resulted in what is now nationally recognized as a good practice approach to this area of work. Holly also has an interest in American literature and two cats.

REENA O'NEILL is a Web Account Manager at Fat Beehive, a creative website design agency specialising in charity and social enterprise web design, where she is responsible for managing relationships with 140 clients. A Management graduate, Reena has also previously managed marketing and communications activity in nonprofits.

SOPHIE SMITH SACHDEVA is a freelance arts and heritage professional, who has recently founded a small press. Sophie has previously worked for Arts Council England, for the Story Museum in Oxford, and for international design consultancy Event Communications. Sophie also writes poetry and speaks Chinese.

DR PAUL WILMOTT studied mathematics at St Catherine's College, Oxford, where he also received his DPhil. He has written several textbooks on the mathematics of derivatives and risk management and is the publisher of a popular finance website and a bimonthly magazine.

In addition, **KRYSTLE MCGILVERY** joined the Board in January 2018. Krystle is a full time Finance Manager for a start-up Tech company. She sits on the CIMA Central London



volunteer committee, who provide networking opportunities keeping students and members up to date. She is keen on increasing the financial literacy of those entering adulthood, and is working to provide opportunities for people to learn. With this in mind, she teaches mathematics to prepare those seeking to improve or develop their skills for a number of different reasons.

VOLUNTEERS

Thanks to: Anna Carnegie, Claire Glazebrook, Gemma Mann, Ricky Simmonds, Hajin Kim, Lee Jun Seong, Lara Gosce, Tom Smart, Susan Akinmoyede, Yasmin Khan, Tania Begum, Bene Sukra, Xiaochen Yang. Sichen Guo, Deepa Selvawai, Wang Lu.

Thanks to UCL Volunteering Services, Reach Volunteering and STEMNet for supporting us in recruiting volunteers.

Staff



ALEXANDRA FITZSIMMONS

CEO AND FOUNDER

Alexandra studied maths at the University of Cambridge. Since then, she has spent almost a decade working in museums and creative media – for example, working directly with visitors on family activities at the V&A, and as an international exhibition design consultant. When not running Maths on Toast, Alexandra teaches Museum Studies as part of the MSc Science Communication at Imperial College London. Alexandra is also a Fellow of the School for Social Entrepreneurs.



FRANCESCA PLACENTINI

EVENT LEADER

Francesca started her professional life as a primary school teacher and has taught both in the UK and abroad. She developed her expertise in family learning through volunteering with a number of museums, including the Charles Dickens Museum and the Museum of Brands. She now leads family maths events for Maths on Toast, as part of a portfolio of education work in community and heritage settings.



HANNAH GATWARD

MARKETING AND OPERATIONS MANAGER

Hannah joined Maths on Toast in 2017. She has broad experience in communications, marketing and events across the media, charity and arts sectors. She has lived in London for ten years, and is interested in cinema, travel and gender politics. She is in possession of her very own maths anxiety.

WWW.MATHS ON TOAST.ORG.UK

INFO@MATHS ON TOAST.ORG.UK

Financial Statements

Year ended 31 August 2017

Statement of Board of Trustees' Responsibilities

The trustees are responsible for preparing the Trustees' Annual Report and the financial statements in accordance with applicable law and regulations. Company law requires the trustees to prepare financial statements for each financial year. Under that law they are required to prepare the financial statements in accordance with UK Accounting Standards and applicable law (UK Generally Accepted Accounting Practice), including FRS 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland.

Under company law the trustees must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the charitable company and of the excess of income over expenditure for that period. In preparing these financial statements, the trustees are required to:

- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the Charities SORP;
- make judgements and estimates that are reasonable and prudent;
- state whether applicable UK Accounting Standards have been followed, subject to any material departures disclosed and explained in the financial statements, and;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charitable company will continue its activities.

The trustees are responsible for keeping adequate accounting records that are sufficient to show and explain the charitable company's transactions and disclose with reasonable accuracy at any time the financial position of the charitable company and enable them to ensure that the financial statements comply with the Companies Act 2006. They have general

responsibility for taking such steps as are reasonably open to them to safeguard the assets of the charitable company and to prevent and detect fraud and other irregularities.

The trustees are responsible for the maintenance and integrity of the corporate and financial information included on the charitable company's website. Legislation in the UK governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions. In addition, the trustees confirm that they are happy that content of the annual review in pages 32 - 46 of this document meet the requirements of both the Trustees' Annual Report under charity law and the Directors' Report under company law.

They also confirm that the financial statements have been prepared in accordance with the accounting policies set out in the notes to the accounts and comply with the charity's governing document, the Charities Act 2011 and Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with FRS 102, The Financial Reporting Standard applicable in the UK and Republic of Ireland published on 16 July 2014.

PREPARATION OF THE REPORT

This report has been prepared taking advantage of the small companies exemption of section 415A of the Companies Act 2006.

This report was approved and authorised for issue by the Board of Trustees on 28th February 2018 and signed on its behalf by:

Rebecca McCaffry CPFA, FCMA, CGMA Treasurer, Board of Trustees

Independent Examiner's Report to the Members of Maths on Toast ('the Company')

I report to the charity trustees on my examination of the accounts of the Company for the year ended 31 August 2017.

RESPONSIBILITIES AND BASIS OF REPORT

As the charity's trustees of the Company (and also its directors for the purposes of company law) you are responsible for the preparation of the accounts in accordance with the requirements of the Companies Act 2006 ('the 2006 Act').

Having satisfied myself that the accounts of the Company are not required to be audited under Part 16 of the 2006 Act and are eligible for independent examination, I report in respect of my examination of your charity's accounts as carried out under section 145 of the Charities Act 2011 ('the 2011 Act'). In carrying out my examination I have followed the Directions given by the Charity Commission under section 145(5) (b) of the 2011 Act.

INDEPENDENT EXAMINER'S STATEMENT

I have completed my examination. I confirm that no matters have come to my attention in connection with the examination giving me cause to believe:

- 1. accounting records were not kept in respect of the Company as required by section 386 of the 2006 Act; or
- 2. the accounts do not accord with those records; or
- 3. the accounts do not comply with the accounting requirements of section 396 of the 2006 Act other than any requirement that the accounts give a 'true and fair view which is not a matter considered as part of an independent examination; or

4. the accounts have not been prepared in accordance with the methods and principles of the Statement of Recommended Practice for accounting and reporting by charities.

I have no concerns and have come across no other matters in connection with the examination to which attention should be drawn in this report in order to enable a proper understanding of the accounts to be reached.

Signed:

Jocelyn Turner

Institute of Chartered Accountants in England and Wales (ICAEW)

Statement of Financial Activities

Incorporating the Income & Expenditure Account and the Statement of Recognised Gains & Losses for the year ended 31 August 2017

	Notes	Unrestricted Funds 2017	Restricted Funds 2017	Total Funds 2017	Total Funds 2016
Income from:					
Donations and legacies	2	13,558	13,000	26,558	41,899
Charitable activities	3	21,033	-	21,033	21,295
Other trading activities		-	-	-	252
Investments*		3	-	3	-
Total income		34,594	13,000	47,594	63,446
Expenditure on:					
Raising funds	4 & 5	-	-	-	1,529
Charitable activities -					
Educational activities and resources	4 & 6	24,660	12,694	37,354	32,171
Continuing professional development	4 & 6	4,179	-	4,179	3,383
Total expenditure		28,839	12,694	41,533	37,083
Net income/(expenditure)		5,755	306	6,061	26,363
Net transfers between funds	13	3,758	(3,758)	-	-
Net income/(expenditure)		9,513	(3,452)	6,061	26,363
Reconciliation of funds:					
Balance brought forward	13	21,976	14,841	36,817	10,454
Balance carried forward	13	31,489	11,389	42,878	36,817

All income from other trading activity and investments was unrestricted as to use in both the current and prior year.

Balance Sheet

As at 31 August 2017

	Notes		Total Funds 2017		Total Funds 2016
Fixed assets:					
Intangible fixed assets	8		-		340
Tangible fixed assets	9		-		280
Total fixed assets			-		620
Current assets					
Stocks	10	2,158		5,199	
Debtors	11	191		4,468	
Cash at bank and in hand		42,923		26,955	
Total current assets		45,272		36,622	
Creditors - amounts falling due within one year	12	(2,394)		(425)	
Net current assets			42,878		36,197
Net assets			42,878		36,817
Funds of the charity:					
Restricted funds	13		11,389		14,841
Unrestricted funds					
General funds	13	31,489		21,976	
			31,489		21,976
			42,878		36,817

The financial statements have been prepared in accordance with section 415A of the Companies Act 2006 relating to small companies and FRS 102 Section 1A.

They were approved and authorised for issue by the Board of Trustees on 28th February 2018 and signed on their behalf by:

Rebecca McCaffry CPFA, FCMA, CGMA Treasurer, Board of Trustees

1. ACCOUNTING POLICIES

Basis of preparation of the financial statements

The financial statements have been prepared in accordance with 'Charities SORP (FRS 102) - Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2015)', the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) and the Companies Act 2006.

The effect of any event relating to the period ended 31 August 2017, which occurred before the date of approval of the financial statements by the Board of Trustees has been included in the financial statements to the extent required to show a true and fair viewof the state of affairs at 31 August 2017 and the results for the year ended on that date. Under the exemption available to smaller charities the Board of Trustees has chosen not to include a Statement of Cash Flows within the financial statements.

Going concern

The financial statements have been prepared on the going concern basis as the Board of Trustees is confident that future reserves and future income is more than sufficient to meet current commitments. There are no material uncertainties that impact this assessment.

Legal status

Maths on Toast is a charitable company limited by guarantee registered in England & Wales, and meets the definition of a public benefit entity under FRS 102. In the event of the Charity being wound up, the liability in respect of the guarantee is limited to £1 per member of the charity. The registered address is Edspace, Block D Hackney Community College, Falkirk St, London N1 6HQ.

Fund Accounting

General funds are unrestricted funds which are available for use at the discretion of the Trustees in furtherance of the general objectives of the Charity and which have not been designated for other purposes.

Designated funds comprise of unrestricted funds that have been set aside by the Trustees for particular purposes. The aim and use of each designated fund is set out in note 13 of the financial statements.

Restricted funds are funds that are to be used in accordance with specific restrictions imposed by donors or that have been raised by the Charity for particular purposes. The cost of raising and administering such funds are charged against the specific fund. The aim and use of each restricted fund is set out in note 13 of the financial statements.

Income

Income is recognised when the charity has entitlement to the funds, any performance indicators attached to the item(s) of income have been met, it is probable that the income will be received, and the amount can be measured reliably.

Donations are recognised in full in the Statement of Financial Activities when entitled, receipt is probable and when the amount can be quantified with reasonable accuracy. Gift aid receivable is included when claimable.

Grant income is credited to the Statement of Financial Activities when received or receivable whichever is earlier, unless the grant relates to a future period, in which case it is deferred.

Income from charitable activities is credited to the Statement of Financial Activities when received or receivable whichever is earlier, unless it relates to a specific future period or event, in which case it is deferred.

Expenditure and irrecoverable VAT

All expenditure is accounted for on an accruals basis and has been included under expense categories that aggregate all costs for allocation to activities. Indirect costs, including governance costs, which cannot be directly attributed to activities, are allocated proportionate to total

direct costs allocated to each project area, as outlined in note 4 of the financial statements. Irrecoverable VAT is charged against the category of expenditure for which it was incurred.

Intangible fixed assets and amortisation

All purchased intangible assets costing more than £500 are capitalised – this was previously set at £250. Intangible fixed assets are stated at cost less depreciation. Depreciation is provided at rates calculated to write off the cost of fixed assets, less their residual value, over their useful life, on a straight-line basis. The useful life used is: Trademarks 10 years.

Tangible fixed assets and depreciation

All tangible fixed assets costing more than £500 are capitalised – this was previously set at £250. Tangible fixed assets are stated at cost less depreciation. Depreciation is provided atrates calculated to write off the cost of fixed assets, less their residual value, over theiruseful life, on a straight-line basis. The useful life used is: Computer equipment 3 years

Cash at bank and in hand

Cash at bank and in hand includes cash in hand, deposits with banks and funds that are readily convertible into cash at, or close to, their carrying values, but are not held for investment purposes.

Stock

Stock is valued at the lower of cost and net realisable value, after making due allowance for obsolete and slow moving items.

Debtors and prepayments

Trade and other debtors are recognised at the settlement amount after any trade discount is applied. Prepayments are valued at the amount prepaid net of any trade discounts due

Creditors

Creditors are recognised where the charity has a present obligation resulting from a past event that will probably result in the transfer of funds to a third party, and the amount due to settle the obligation can be measured or estimated reliably.

Pensions

The charity operates a defined contribution pension schemes which is administered by an external independent pension provider. Contributions are recognised in the Statement of Financial Activities as they fall due, however during the current and previous financial years all eligible employees chose to opt out of the scheme.

Critical estimates and judgements

In preparing financial statements it is necessary to make certain judgements, estimates and assumptions that affect the amounts recognised in the financial statements. The annual depreciation charge for property, plant and equipment is sensitive to changes in useful economic lives and residual values of assets. These are reassessed annually and have been amended this year – see policy tangible fixed assets above.

In the view of the Trustees in applying the accounting policies adopted, no judgements were required that have a significant effect on the amounts recognised in the financial statements nor do any estimates or assumptions made carry a significant risk of material adjustment in the next financial year.

Financial instruments

Basic financial instruments are measured at amortised cost other than investments which are measured at fair value.

2. INCOME FROM DONATIONS AND LEGACIES

	Unrestricted Funds	Restricted Funds	Total Funds	Unrestricted Funds	Restricted Funds	Total Funds
	2017	2017	2017	2016	2016	2016
John Lyon's Charity	-	13,000	13,000	-	13,000	13,000
Man Charitable Trust	13,500	-	13,500	11,000	-	11,000
The Mercers Company				-	9,170	9,170
United St. Saviour's Charity				-	1,210	1,210
Grants	13,500	13,000	26,500	11,000	23,380	34,380
Other donations and income	58	-	58	1,451	6,068	7,519
	13,558	13,000	26,558	12,451	29,448	41,899

The income from the prior year has been reallocated to differentiate between general grants and contract income as per the Charity SORP FRS 102 - total income remains unchanged.

INFO@MATHS ON TOAST.ORG.UK

Notes to the Financial Statements

3. INCOME FROM CHARITABLE ACTIVITIES

	Unrestricted	Restricted Funds	Total Funds	Unrestricted	Restricted Funds	Total Funds
	Funds	0045	2045	Funds	001/	0047
	2017	2017	2017	2016	2016	2016
Consultancy services and workshop events	7,222	-	7,222	16,240	-	16,240
Sale of educational resources	13,811	-	13,811	-	5,055	5,055
	21,033		21,033	16,240	5,055	21,295

The income from the prior year has been reallocated to differentiate between general grants and contract income as per the Charity SORP FRS 102 - total income remains unchanged.

4. TOTAL EXPENDITURE

	Direct staff	Direct other	Indirect staff	Indirect other	Total Funds	Direct staff	Direct other	Indirect staff	Indirect other	Total Funds
	costs 2017	costs 2017	costs 2017	costs 2017	2017	costs 2016	costs 2016	costs 2016	costs 2016	2016
Raising funds	-	-	-	-	-	-	907	386	236	1,529
Charitable activities										
Educational activities and resources	10,198	11,274	8,673	7,209	37,354	9,905	9,180	8,126	4,960	32,171
Continuing professional development	2,066	336	970	807	4,179	2,007	-	855	521	3,383
	12,264	11,610	9,643	8,016	41,533	11,912	10,087	9,367	5,717	37,083

The expenditure from the prior year has been re-presented to take account of the changes in the cost allocation model and to bring it in line with the Charity SORP FRS 102. Indirect costs have been allocated based on the proportion of direct costs attributable to each activity.

An analysis of staff costs can be found in note 7.

An analysis of costs of raising funds split between restricted and unrestricted funds can be found in note 5.

An analysis of charitable activities split between restricted and unrestricted funds can be found in note 6.

Indirect costs consists of the following:

Governance costs includes reimbursement of trustee expenses, accounts preparation fees and filing fees – the independent examination has been provided pro-bono for the last two years.

	Total Funds	Total Funds
	2017	2016
Indirect salaries	9,643	9,367
Office overheads	5,923	4,603
Marketing	1,474	1,101
Governance	619	13
	17,659	15,084

5. EXPENDITURE ON RAISING FUNDS

	Unrestricted Funds 2016	Restricted Funds 2016	Total Funds 2016
Direct costs	17	890	907
Indirect cost	622	-	622
	639	890	1,529

There was no direct expenditure on fundraising in the current year – the prior year expenditure related to a crowdfunding campaign for developing the Number Rumbler family maths game.

The expenditure from the prior year has been re-presented to take account of the changes in the cost allocation model and to bring it in line with the Charity SORP FRS 102.

6. EXPENDITURE ON CHARITABLE ACTIVITIES

	Unrestricted	Restricted Funds	Total Funds	Unrestricted	Restricted Funds	Total Funds
	Funds			Funds		
	2017	2017	2017	2016	2016	2016
Educational activities and resources						
Direct costs	10,778	10,694	21,472	7,003	12,082	19,085
Indirect costs	13,882	2,000	15,882	5,692	7,394	13,086
	24,660	12,694	37,354	12,695	19,476	32,171
Continuing professional development						
Direct costs	2,402	-	2,402	2,007	-	2,007
Indirect costs	1,777	-	1,777	1,376	-	1,376
	4,179	-	4,179	3,383	-	3,383
	28,839	12,694	41,533	16,078	19,476	35,554

The expenditure from the prior year has been re-presented to take account of the changes in the cost allocation model and to bring it in line with the Charity SORP FRS 102.

7. STAFF COSTS

	Total Funds 2017	Total Funds 2016
Gross salaries	21,907	21,210
Employer's NIC		69
	21,907	21,279

8. INTANGIBLE FIXED ASSETS

	Trademark	Total Intangible assets
Cost at 1 September 2016	340	340
Decapitalised in period	(340)	(340)
Cost at 31 August 2017	-	-

The average headcount during the year was 2 (2016: 2).

The average number of employees calculated as full-time equivalents during the period was 0.5 (2016: 0.3).

No employee received employee benefits of more than £60,000 (2016 - NIL).

The total employee benefits paid to key management personnel during the year was £13,775 (2016 - £13,564).

9. TANGIBLE FIXED ASSETS

	Computer Equipment	Total Tangible Assets
Cost at 1 September 2016	280	280
Decapitalised in period	(280)	(280)
Cost at 31 August 2017	-	-

10. STOCK

	Total Funds 2017	Total Funds 2016
Number Rumbler	1,978	4,197
Festival of Triangles kit	180	854
Other	-	148
	2,158	5,199

11. DEBTORS

	Total Funds 2017	Total Funds 2016
Accounts Receivable	-	3,665
Staff floats	100	-
Owed from Amazon	91	100
Other debtors	-	703
	191	4,468

12. CREDITORS - AMOUNTS FALLING DUE WITHIN ONE YEAR

	Total Funds 2017	Total Funds 2016
Accounts payable	300	-
Accruals	600	-
Accrued salaries	1,494	-
Staff expenses	-	33
Other creditors	-	392
	2,394	425

13. ANALYSIS OF CHARITY FUNDS

	Balance Brought Forward 2017	Income Received in Year 2017	Amounts Expended in Year 2017	Transfer Between Funds 2017	Balance Carried Forward 2017	
Unrestricted funds						
General funds	21,976	34,594	(28,839)	3,758	31,489	
Total unrestricted funds	21,976	34,594	(28,839)	3,758	31,489	
Restricted funds						
John Lyon's Charity	10,897	13,000	(12,508)	-	11,389	
The Mercers Company	186	-	(186)	-	· -	
Number Rumbler sales	3,758	-	-	(3,758)	-	
Total restricted funds	14,841	13,000	(12,694)	(3,758)	11,389	
Total funds	36,817	47,594	(41,533)		42,878	
	Balance Brought Forward 2016	Income Received in Year 2016	Amounts Expended in Year 2016	Transfer Between Funds 2016	Balance Carried Forward 2016	
Unrestricted funds						
General funds	9,946	28,943	(16,717)	(196)	21,976	
Total unrestricted funds	9,946	28,943	(16,717)	(196)	21,976	
Restricted funds						
Camden	(196)	-	-	196	-	
The Ernest Cook Trust	704	-	(704)	-	-	
John Lyon's Charity	-	13,000	(2,103)	-	10,897	
The Mercers' Company	-	9,170	(8,984)	-	186	
Number Rumbler donations	-	6,068	(6,068)	-	-	
Number Rumbler sales	-	5,055	(1,297)	-	3,758	
United St. Saviours		1,210	(1,210)			
Total restricted funds	508	34,503	(20,366)	196	14,841	
Total funds	10,454	63,446	(37,083)		36,817	

RESTRICTED FUNDS -JOHN LYON'S CHARITY

This is a three-year grant supporting educational workshops and events in the London Borough of Camden.

RESTRICTED FUNDS -THE MERCERS COMPANY

This was a one-year grant to develop a set of resources to extend the learning from the 'We're stuck' show through a series of follow up activities.

RESTRICTED FUNDS -NUMBER RUMBLER SALES

In the prior year sales of the Number Rumbler game had been incorrectly treated as restricted income. Instead of restating the prior year figures, the Trustees agreed to transfer the balance brought forward to unrestricted reserves to correct the treatment of the balance brought forward.

14. ANALYSIS OF NET ASSETS

	Unrestricted Funds 2017	Restricted Funds 2017	Total Funds 2017	Unrestricted Funds 2016	Restricted Funds 2016	Total Funds 2016
Fixed assets	-	-	-	620	-	620
Current assets	33,087	12,185	45,272	21,781	14,841	36,622
Current liabilities	(1,598)	(796)	(2,394)	(425)	-	(425)
	31,489	11,389	42,878	21,976	14,841	36,817

15. TRUSTEE REMUNERATION

During the year, no trustee received any remuneration (2016 - £NIL). One member of the Board of Trustees received reimbursement of expenses totalling £19 (2016 - £NIL).

16. RELATED PARTY TRANSACTIONS

During the year there were no transactions carried out with related parties (2016 - £NIL).



Maths on toast
Annual Report 2016-17

If you would like to know more, please get in touch...

020 7613 8389

info@mathsontoast.org.uk

www.mathsontoast.org.uk

Find us on Facebook or follow us on

Twitter @mathsontoast

Donate online through Virgin Money Giving

Maths on Toast is a charity based in England and Wales

Registered charity no. 1151486
Registered company no. 08196529
Registered address: c/o Edspace, Block D,
Hackney Community College, London N1 6HQ

Annual Report design: RickySimmonds