

E*ighty eight pianists*



Imagination

Innovation

Invention

Every child can be an engineer

- Enhance your curriculum with a free STEM outreach practical project for KS2
- In line with OFSTED best practices for encouraging children to pursue STEM activities
- Fantastic for bridging the gap for Pupil Premium children

Introduction

This is a fantastic opportunity for schools to get involved with a national community of budding designers and engineers. This project is aimed at providing a STEM programme for all Key Stage 2 girls and boys at 40 primary schools across the country. This is particularly useful for bridging the gap between Pupil Premium eligible and other students by creating a fully inclusive and cost-free opportunity, as well as encouraging all children in Key Stage 2 to get inspired by STEM career paths in line with OFSTED best practices. This is a free project for schools. All that will be required will be pencils, paper and your children's imaginations.

What is 88 Pianists?

To mark 500 years since Leonardo da Vinci's death, we're asking: has the smartphone killed invention? To find out, we want primary school children across the UK to invent their way to an unbreakable world record for the number of people playing the same piano. Da Vinci was a renowned inventor, engineer and artist. He even invented his own musical instrument, the Viola Organista.

In an ever-more digital world, can we still invent and make something physical and unexpected? Can we fuse engineering and art? The world-record currently stands at 19 people playing the same piano, but if we could invent mechanical finger-extenders, we could have one person on each note: 88 Pianists!

We are inviting Key Stage 2 children from across the whole of the UK to design these mechanical fingers. Hearing about da Vinci and other inventors, and learning how a piano works, the children will create the final designs. They will work together to build them into real life mechanical extendable fingers, bring the fingers to Birmingham, teach young West Midlands piano students how to use them, and watch as Julian Lloyd Webber conducts a newly commissioned piece to break the world record on the 19th August 2019.

Who are we?

88 Pianists was created by Professor Julian Allwood at the University of Cambridge Department of Engineering, in collaboration with engineering academics from universities across the UK.

- Little planning required from teachers as our Engineering Teams will run the sessions
- Engineering starts with an idea and ends with a physical product. We want primary school children to join us through the entire journey.

What will the project involve?

- **June-September 2018: BEGINNING**

Before the summer holidays of 2018 approaches, we would like to confirm your participation and organise design sessions to take place between October and December 2018. This will be a full day or two half days, to take place at your convenience. You will be assigned a contact within our organising committee, to whom you can direct any concerns or questions. We can provide templates for letters to parents and other administrative support.

- **September-December 2018: DESIGNING**

Little planning will be required by the teachers as the sessions will be run by one of our Engineering Teams, comprising two engineers and one professional musician from a top UK university. Between October and December, the children of Key Stage 2 will gather together with our engineers to take part in engineering activities and to come up with design ideas for these mechanical fingers: the madder, the better! The work done may be taken back into the classroom by the teachers, and we will be happy to provide you with the resources to do so. Or, if you prefer, this can simply be a stand-alone project which operates separately from the curriculum.

- **December 2018-March 2019: SELECTING**

By the end of 2018, we will have thousands of fantastic designs from children unencumbered by the usual reservations of adults! We will choose the 88 fingers we plan to use for the final performance, build prototypes and test them.

- **January-May 2019: MAKING**

Your Engineering Team will return to your school to build the final products with the children, according to their designs. We will provide all tools, equipment and materials.

- **9th August 2019: RECORD-BREAKING**

The world record will be broken with 88 pianists playing a specially composed piece at a concert in Birmingham. Every design we received will be displayed within the venue. We will be creating a film of the event which will immediately be released online. A number of children from each school will be invited to attend this exciting event and all participating children and schools will be presented with a certificate of their involvement with breaking a world record.

Get in touch:

Tel: 01223 748 561

Email: 88Pianists-contact@eng.cam.ac.uk

University of Cambridge Department of Engineering
Trumpington Street
Cambridge
CB2 1PZ

www.88pianists.com