CRACKING THE CODE

TEACHER NOTES

Cracking the Code: Maths Mission is challenging young people to design their own escape room by applying their creativity, use of maths and collaborative problem solving skills. The winning team will have their ideas brought to life and win £2,000 for their school.

This is an open competition targeted at Year 7 students but open to all Key Stage 3 to change perceptions of maths. Through classroom exercises, live events and group work, students will collaboratively solve and design their own maths problems based around 'Escape Rooms.'

The competition aims to promote maths as a practical, engaging and problem-solving tool.

Resources

To help you launch the competition within your school, we've provided a ready-to-teach maths **Lesson Plan** with an exciting escape room theme and **supporting resources** to capture students' interest. The activities introduce the escape room concept while developing students' creative problem-solving and teamwork skills.

- Lesson plan
- Teacher hints and answers handbook
- PowerPoint presentation
- Student challenge sheets
- Student answer booklet

1. Teach the maths lesson and hand out Competition Leaflets

We suggest teaching the Lesson Plan and then handing out the Competition Leaflet to students, so they can start selecting their teams.

2. Students select their teams

Select teams (4-6 students per team, ideally mixed ability) for the competition and teacher registers team.

3. Register your teams

You must register your student teams for the competition by **19th December 2017** via a short registration form on the website at: http://mathsmission.challenges.org. Selected teams will come along to an **inspiration event on 1st February 2018 at the Science Museum, London**, to learn about the competition, be inspired by maths experts, have a go at code-breaking puzzles in their teams and to begin working on their escape rooms. (Travel and subsistence bursaries are available.) For teams that don't attend the workshop, there will be resources from the day available at http://mathsmission.challenges.org

4. Student teams create their competition entries

After the event, teams will have until **15th of March 2018** to complete a workbook with their own escape room concept. If your timetable allows, you might want to set aside lesson time for them to work on their maths puzzles; alternatively, student teams can create their entries outside the classroom and bring them back to you.

The concept must have at least 4 puzzle questions which result in a 4-digit code and unlock a padlock. Guidelines and support can be found at: http://mathsmission.challenges.org.

5. Collect and send in students' competition entries

Collect student teams' entries (workbooks) and submit to: Cracking the Code – Maths Mission, Nesta, 58 Victoria Embankment, London EC 4Y 0DS or submit electronically to education@nesta.org.uk

Competition opens 1st February 2018 and all entries must be received no later than 15th March 2018.

Eligibility Criteria

To be eligible to enter, students must be:

- aged between 11 and 14
- based in the United Kingdom
- in a team of 4-6

Full Terms and Conditions can be found at: http://mathsmission.challenges.org

Prizes

- The winning team will receive **£2,000 for their school** to support maths programmes, **goody bags**, and the chance to see their escape room come to life.
- One runner-up will receive **£1,000 for their school**, and **goody bags**.

Who's behind the prize

Cracking the Code is part of the **Maths Mission** pilot series, which aims to improve attitudes and attainment in maths. Maths Mission was founded and is run by by Nesta and Tata, and Cracking the Code has been developed with the support of IT services provider, Tata Consultancy Services.

Inspired by 'The Crystal Maze' and growth of 'escape rooms' the competition has been designed to engage students predominately in Year 7 but open to all Key Stage 3 with the objective to inspire and engage students in maths-related activities.

For more information on the partners visit http://mathsmission.challenges.org