

## The Further Mathematics Support Programme

# Problem Solving at AS and A level

**A FREE one day conference featuring activities to help students develop their problem solving skills**

**Venue: UCL Institute of Education, 20 Bedford Way, London WC1H 0AL**

**Date: 2<sup>nd</sup> July 2018**



One of the overarching themes of the new AS and A level specifications is the requirement for students to solve mathematical problems.

This conference is suitable for all AS and A level Maths students who wish to develop their problem-solving skills.

The workshops provide a variety of activities designed to get students to engage with problem solving. Further Maths is not required.

## Conference Outline

**Students will participate in the following workshops throughout the day:**

### **A: Getting started**

In this workshop students will learn how to ask themselves some key questions when attempting mathematical problems. They will see how problems are developed from simple ideas and attempt to write some problems of their own.

### **B: Fermi Estimates**

In this workshop students learn how to break down problems to identify the key information they will need. Only basic arithmetical skills are required to solve the problems but each one requires students to have a clear idea of the information they need and what makes a good estimate.

### **C: Working in a Group**

In this workshop students will work in a group to solve a problem. This could be anything from producing a graphical design to making a 3D mathematical origami model.

### **E: Key Problem Solving Techniques**

This lecture explains some key problem solving techniques to the students and gives them the opportunity to try these out as the lecture progresses.

**Teachers will participate in three of these workshops and will also attend a session focused specifically on university admissions tests.**

**Timetable:**

10:00 – 10:30	Arrival and registration
10:30 – 10:45	Welcome
10:45 – 11:45	Session 1
11:50 – 12:50	Session 2
12.50 – 13:35	Lunch
13:35 – 14:35	Session 3
14.40 – 15:40	Session 4
15.45 – 16:00	Closing plenary

**Further information**

Lunch will be provided for teachers, but students will need to bring a packed lunch.

For more information email: [sineadvaughan@furthermaths.org.uk](mailto:sineadvaughan@furthermaths.org.uk)

**Booking form:** <https://goo.gl/forms/KRaaAAnZPaqmRnQF3>