

# THE GIANT TRIANGLES

## *Giant triangles develop mathematical language and thinking*



*The giant triangles being used by prospective mathematics teachers studying at Goldsmiths College, London 2013*

The giant triangles have an immediate visual appeal that draws people in. Students can go inside the geometric shapes they build. They naturally want to explore what they can make together. Carefully designed activities using guided discovery enable students to learn the mathematical properties of the shapes they are building. Careful questions and discussion can help develop the more abstract language and mathematical concepts that are embodied in the shapes. Size and colors aid this process by holding students' attention and

focusing discussion on specific features, such as faces or edges, that can be clearly indicated to the class by touching or pointing.

### *Group work*

All activities with the triangles engage learners in co-operative problem solving as they are too big for one person to assemble alone. This helps students develop communication skills and an ability to organize themselves to work in groups. Four or five per group is recommended.

### *Which Students can benefit?*

The kit can be used at any age and mathematical level from elementary up through pre-calculus. Once students can tie their shoe laces, they can use the giant triangles. Many activities can be extended to advanced topics and calculations including some proofs. The triangles, due to their practical nature, can also give students another, hands-on route to exploring mathematical patterns through shapes they build. This can help engage students who have yet to fully apply themselves in the mathematics classroom.