

Touring exhibitions of The Magic Mathworks Travelling Circus

Our exhibitions are assembled on the basis of the late Z. P. Dienes' multiple embodiment principle: the idea of realising the same concept in a variety of physically disparate forms. Thus the concept of 'common multiple' might be realised by balancing a beam, meshing gears or hitting chime bars. (From the www.magicmathworks.org menu choose 'Home' then 'Introduction'.)

Corresponding to the real Circus is the 'Virtual Circus'. For key topics and interactives there are computer equivalents through which the work can be extended. For example, the real 'rubber band enlarger' uses two linked bands. More can be added in the corresponding interactivity.

The blue set

This covers around 20 concepts, 5 stations devoted to each. These are table-based interactives, typically needing 40 cm square, so you might get 3 to a standard classroom table. We never put out all our stations. Even so, an exhibition needs the equivalent of 3 classrooms plus an induction area. This is currently in use in northern Germany. (From the www.magicmathworks.org menu choose 'Stations/Bestandsliste'.)

The green set

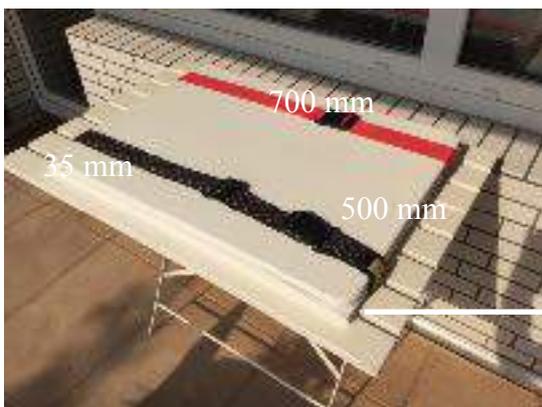
This is a reduced version of the **blue** set, on permanent loan to The George Eliot School, Nuneaton.

The red set

Maths Year 2000 used large public venues like shopping malls and football stadia. For this we built a set of around 20 large, floor-based interactives. This is on permanent loan to Lifetime Lab in Cork, Ireland. (From the www.lifetimelab.ie menu choose 'Schools@Lifetime Lab' then 'MathsWorks - Primary Maths Workshop'. For video, from the www.magicmathworks.org menu choose 'Video tour'.)

The purple set

This is essentially the **red** set but designed to go on tables. The 1 m wide easels used in the **red** set have become 70 cm wedges, as shown here:





There are activities on both sides of the wedge. Either they are distinct but related in some way, or the back side provides blank tables, figures and hints through which the activity can be pursued. In the case shown, the two boards are themselves the apparatus, there are no additional models, just a supply of rubber bands and marker pens. But in most cases additional items stand on the base boards, which are white metal dry-wipe/magnet boards. When packed, the board protects the folded wedge and the free-standing items have their own boxes.

There are 4 floor activities, and 20 stations needing between them 15 tables to support the base boards. Stools are optional. The exhibition occupies about 100 square metre.

Even taking account of the bulkiest interactives, the whole exhibition packs down into a space of 0.7 m x 0.7 m x 0.5 m. The total mass is about 120 kg.

Paul Stephenson

6.8.18