



### GRID DESIGN



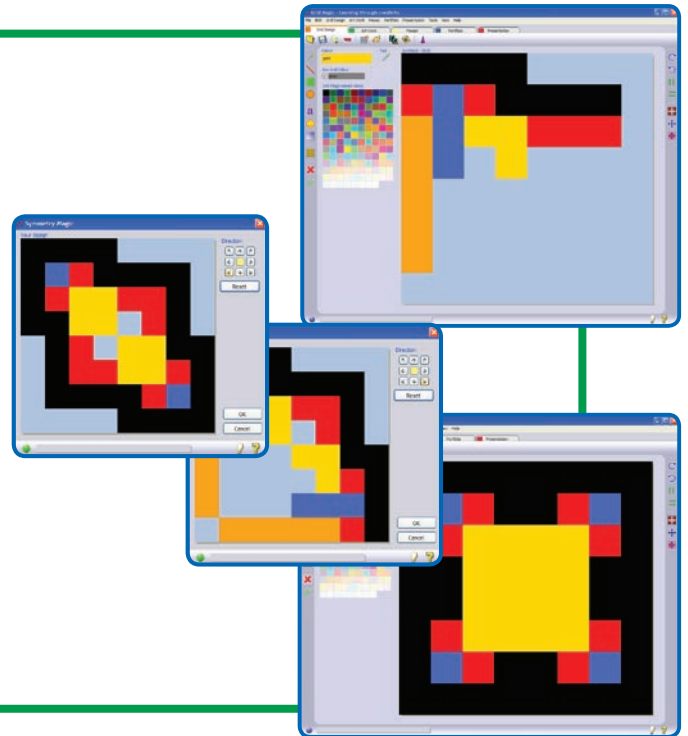
1. Start on an 8x8 grid. Create a random design using the pen tool.



2. Use the symmetry tool to create a symmetrical pattern. There are many different possibilities, so take some time to explore them. Use the reset button to start again.



3. Send your design to **Artwork**.

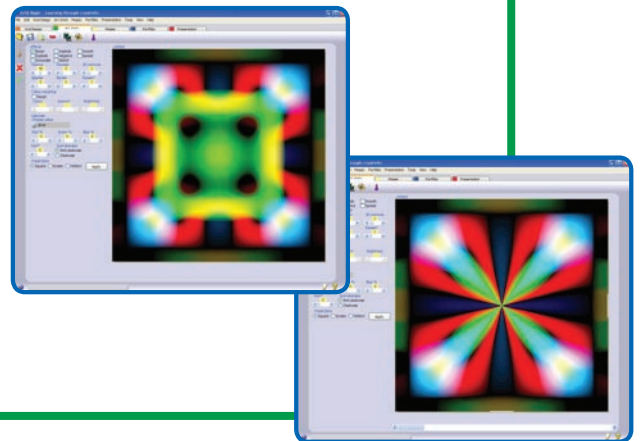


### ARTWORK

4. Add image-processing effects that don't destroy your symmetry, such as boost, explode, implode, smudge etc.



5. Send your best symmetrical design to **Presentation**.



### PRESENTATION

6. Add the finishing touches to your artwork before printing it.





### Art Project: Simple Symmetry

#### Level: Beginner

- Maths skills:**
- random
  - planes of symmetry
  - maintaining symmetry

- ICT skills:**
- the pen tool
  - send (copy/paste)
  - simple image-processing

- Art skills:**
- Symmetrical art forms

**Definition:** Symmetry: A design with identical form on opposite sides of a dividing line.

**Progression:** Follow this activity with the Level 2g 'Advanced Symmetry' Art Project.

**Grid Size and Shape:** This Art Project is most effective starting on a low resolution (small number of cells) grid as the image-processing effects will be more dramatic. The pattern will be converted to high resolution in Artwork.

### Teaching Points:

- This is a very simple activity designed for absolute beginners. Pupils will have time to try several different designs and explore the different Artwork effects.
- Some artwork effects will destroy the symmetry, for example, 3D colourise and swirl. In the next project (2g), pupils will learn how to re-apply their symmetry. In this activity, the aim is for the pupils to recognise when symmetry is present and when it is not. This can be hard to spot if there is only one diagonal plane of symmetry
- There is no requirement to save the work for the next project. If pupils add a frame and border in Presentation, gridmagic will offer to save the presentation at the end of the lesson. In later projects, pupils are shown how to create and save their work in Portfolios.
- There are many printing options to choose from. The Print Magic dialog previews the printed paper, so pupils know in advance what their printed work will look like. If you want the work for a wall display, the single print at medium size is fine.

