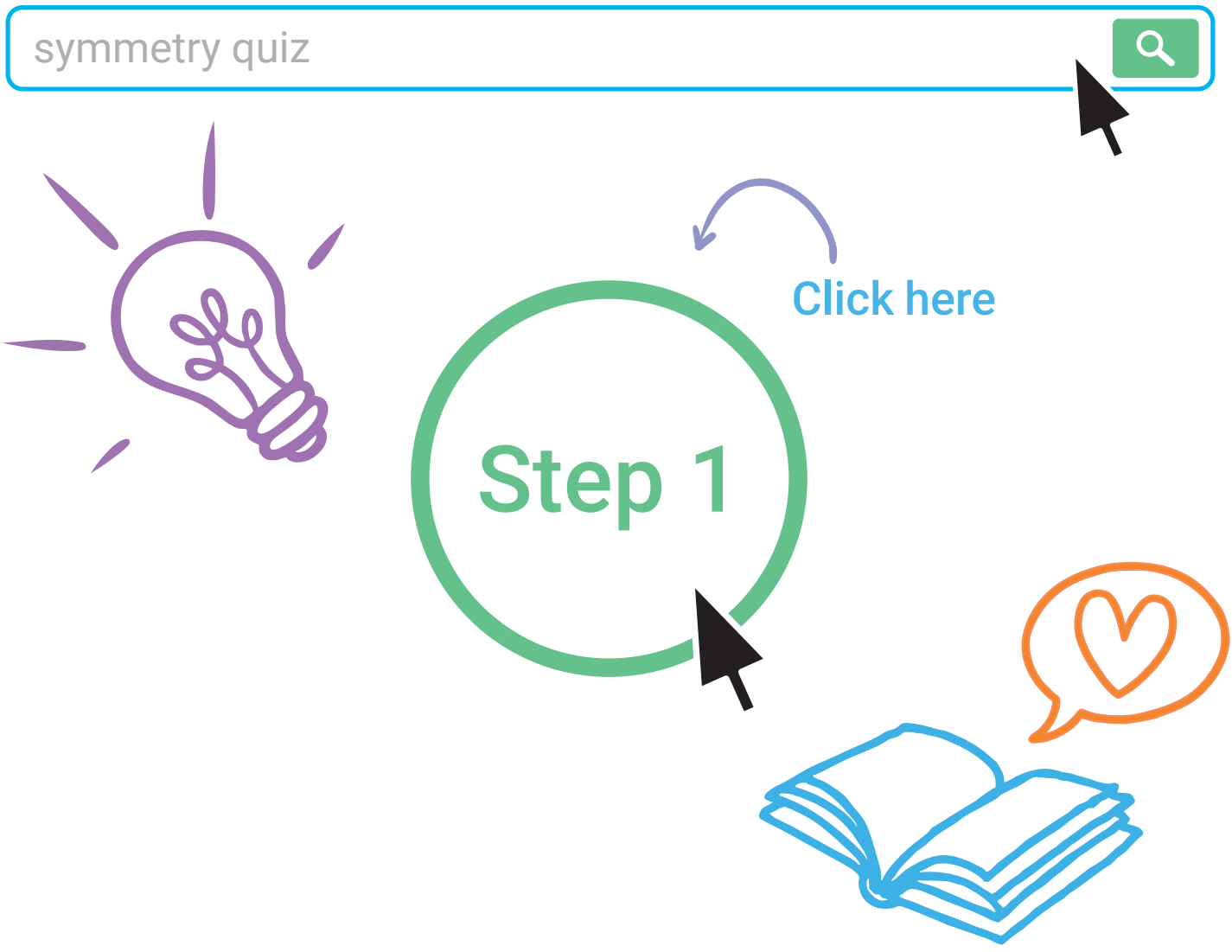
Year 3 Symmetry:
A Step-by-Step Guide for Parents

This step-by-step explanation to learning fractions can help you support your child's learning at home. Each subject is broken down into manageable chunks, providing you with a simple guide to follow when exploring. Whether your child is just mastering the idea of mirror lines and reflective symmetry or whether they are already to recognise multiple lines of symmetry, there'll be a step in this guide that's right for your child.

Within **this area of the website**, you will find a selection of resources intended to help your child learn about each step of this guide. Each step also contains a keyword or phrase that you can use to search the Twinkl site for more resources and activities, designed to support your child in achieving that stage. Simply type the keyword or phrase into the search bar and press enter to explore together.



We hope you find the information on our website and resources useful. The contents of this resource are for general, informational purposes only. This guide is intended to offer parents general guidance on what subject areas tend to be covered in their child's year group and where they could support their children at home. However, please be aware that every child is different and information can quickly become out of date. There are some subject areas that we have intentionally not covered due to the nature of how they are taught or because a trained professional needs to teach these areas. We try to ensure that the information in our resources is correct but every school teaches the national curriculum in its own way. If you would like further guidance or are unsure in any way, we recommend that you speak to your child's teacher or another suitably qualified professional.

Symmetry

What Is Reflective Symmetry?

Reflective symmetry is a form of symmetry where one half of a shape matches the other half. The lines of reflective symmetry can be thought of as 'mirror lines'. Children can explore this type of symmetry by placing a thin mirror across the boundary where you expect a shape to perfectly reflect. The mirror should cut the object in half so that the shapes on both halves are equal. Another method is to precisely cut the shape out and try folding it. If you fold exactly down a line of reflective symmetry, the two halves will match exactly when the shape is folded. If you then open the shape back up, put a mirror on the fold and look into the shiny side of the mirror, you should find the shape looks complete.

What Does the English National Curriculum Say About Symmetry for Year 3?

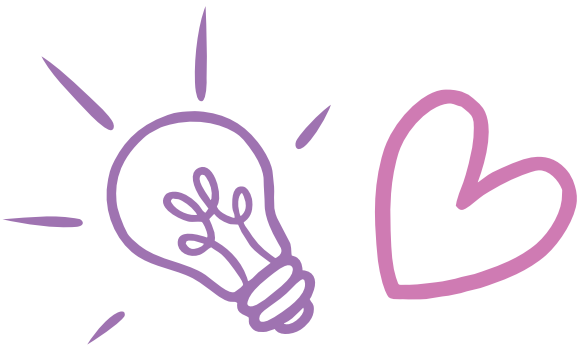
Children are not expected to make huge strides in their understanding of symmetry in year 3. When they meet it, it is likely that they will be building on their understanding of reflective symmetry from year 2 and becoming increasingly accurate in drawing and completing shapes to demonstrate symmetry. In year 3, children explore shapes with increasing numbers of sides (both symmetrical and irregular) and may begin to explore how certain shapes have several lines of reflective symmetry, whereas other shapes may have only one or none.

What Are Polygons?

Polygons are flat shapes, so they are two-dimensional. In general, the term polygon is used for flat shapes that have five sides or more, such as pentagons, hexagons and octagons. However, the word can be used for all straight-sided shapes and so could include triangles (3-sided shapes) and quadrilaterals (4-sided shapes) too. Children in key stage 2 need to learn about symmetry in a wide range of polygons.

What Are Polyhedra?

Polyhedra are solids shapes that might also be called three-dimensional shapes. One three-dimensional shape is a polyhedron and the plural (more than one) is polyhedra. Pyramids, triangular prisms, cubes and dodecahedrons are all examples of polyhedra.



Sweet Mosaic Patterns

Try using coloured sugar-coated sweets and chocolates to make patterns and pictures that are symmetrical, just like mosaics. Make a square border of one colour of sweets. Can you make a design that is symmetrical? How many lines of reflective symmetry can you find?

Know Your Flags

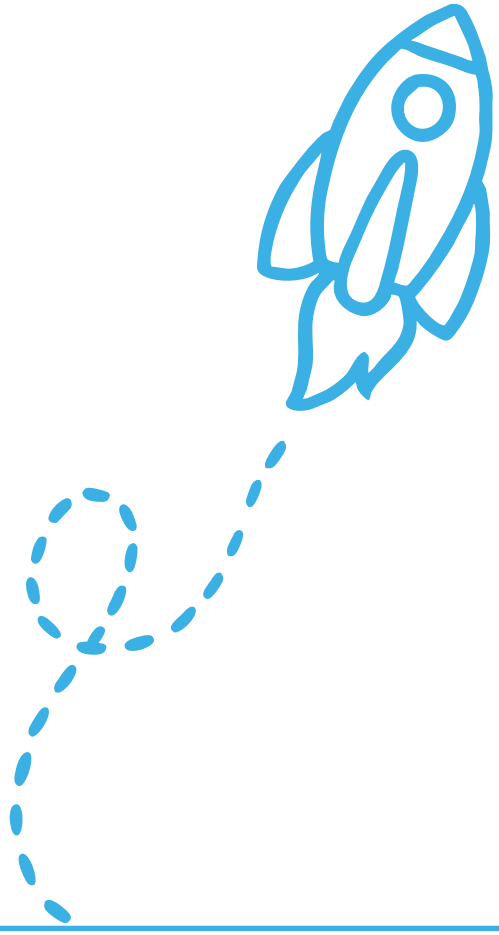
Use an atlas or our **World Flags Poster** to explore how many flags have a line of reflective symmetry. What about the Union Jack Flag? How many positions can you place a mirror and still get the full flag when you look into the shiny side? Flags are a great way to engage your child in a conversation about symmetry.

Craft Some Symmetry

Use any craft materials you can find to make symmetrical butterfly wings: sequins, dry pasta or bobbles. Our **Butterfly Outlines** can be a base for adding your craft materials to make a symmetrical

Painting Symmetry

Mark a piece of paper halfway through using a ruler. On one side of the page, paint a design of various shapes and colours. While the paint is still wet, fold the paper along the halfway line and press the painted side against the plain one. As you pull them apart, you should have a symmetrical picture. Challenge your child to create specific shapes that they've learnt in school.



Step 1

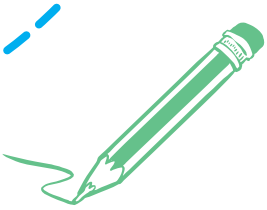
Symmetry Quiz

Remind your child of the language of symmetry from key stage 1 and move them into work for key stage 2 by answering the questions in this **Symmetry Quiz**. As they choose an option, the PowerPoint will tell them if they're right or wrong. If this seems too tricky for your child, try using our **Road Signs Safety Quiz** which encourages your child to spot symmetrical or asymmetrical (not symmetrical) signs.

Step 2

Lines of Symmetry

In year 3, children explore a wide range of shapes that have symmetry. Can your child find how many lines of reflective symmetry each of these shapes have? This is the same as the number of positions you can place a mirror in and still get an image that looks like the original shape. In addition, your child will also need to name the shape and count its sides. If your child finds this tricky, then you can print out this **Lines of Symmetry KS2 Poster** or show it on-screen to help your child to spot the lines of symmetry.



Step 3

Drawing Lines of Symmetry

At this stage, your child will now be able to recognise, read and write a wide variety of high frequency words and will be spelling them mostly accurately in their writing. They will continue to use them in simple sentences and use them as conjunctions (connecting words) to create compound sentences ('and', 'but' and 'so' can be used in this way). Your child may also benefit from dictation exercises incorporating high frequency words – these dictation passages are a great way to practise writing high frequency words in this way.

Step 4

Creative Symmetry

This pack includes activities that look at symmetry in Islamic architecture and design. It's a lovely way to apply the symmetry understanding your child has to creative design and more intricate diagrams, patterns and drawings. It's also useful to show how symmetry applies to aesthetics as well as architecture.

Explore and Discover More

Twinkl Go! is a digital platform, hosting interactive content such as videos, games, audiobooks and more. Twinkl Go! enables digital content to be streamed to your computer or mobile device.

Twinkl Book Club is our book subscription service. Enjoy our original works of fiction in beautiful printed form, delivered to you each half-term and yours to keep!

Twinkl Boost is a range of intervention resources, created to support and lift learning with children at every level. These include our easy-to-use SATs and Phonics Screening resources.

Imagine resources are designed to help your children to think creatively, question and imagine. Every week, a new topic consisting of five photos, each with related activities, is created.

Twinkl Originals are engaging stories written to inspire pupils from EYFS to KS2. Designed to encourage a love of reading and help curriculum-wide learning through accompanying resources.

Twinkl Kids' TV is our wonderful YouTube channel dedicated to fun and informative video-style resources full of new and creative activities you can try at home!