

1. Everyday symmetry

Our first aim is to understand the symmetry we observe in nature and art. What is common to all of these examples? Can we condense this into a single precise and concise definition of symmetry?

1. Write down examples of objects and animals that you think look symmetric. In what way are they symmetric? Do there seem to be different types of symmetry? You might find drawing pictures useful here!

2. Compare two of the examples you thought of above. Can you say that one is more symmetric than the other? What do you think makes an object more or less symmetric?

3. As a group, try to invent a definition of what a symmetry of an object is. How do your examples fit this definition?

4. M.C. Escher was a Dutch artist whose work is a wonderful example of the relationship between mathematics and art. Looking at his artwork, what symmetries do you notice? How do these fit in with the definition you invented above?