

LEARNING and TEACHING POINTS

for

Chapter 25 Classifying Shapes

Children will develop geometric concepts, such as those discussed in this chapter, by experiences of classifying, using various attributes of shapes, informally in the first instance, looking for exemplars and non-exemplars, and discussing the relationships between shapes in terms of samenesses and differences.

Remember when talking about various special quadrilaterals that a square is a special kind of rectangle, and that a rectangle is a special kind of parallelogram.

The role of a definition in teaching and learning is not to enable children to formulate a concept, but to sharpen it up once the concept has been formed informally through experience and discussion, and to deal with doubtful cases.

Children can investigate which shapes tessellate and which do not, discovering, for example, that all triangles and all quadrilaterals do. They could use a plastic or card shape as a template, drawing round it in successive positions.

Give children opportunity to explore the properties of various shapes, including the different kinds of triangles and quadrilaterals, and regular and irregular shapes, by folding, tracing, matching, looking for reflective and rotational symmetries, and drawing out the implications of these.

Construction of some simple three-dimensional shapes from nets is an excellent practical activity for primary school children, drawing on a wide range of geometric concepts and practical skills.