LEARNING and TEACHING POINTS

for Chapter 26 Perimeter, Area and Volume

To avoid confusion between area and perimeter, use the illustration of fields and fences to explain these concepts and pose problems about area and perimeter in these terms. Children can be introduced to solid volume by rearranging various numbers of unit cubes in the shape of cuboids; use numbers with plenty of factors, such as 12 and 24. Older, more able primary children could investigate the way the surface area changes.

Once children understand clearly the distinction between perimeter and length get them to investigate the way in which a fixed perimeter can produce a range of different areas, and vice versa. Some more able children might explore areas of shapes such as parallelograms, triangles and trapeziums, using the methods of cutting and rearranging explained here.