## HOW CAVES ARE FORMED



- Over thousands of years the action of water has eroded the DOLOMITIC CONGLOMERATE and CARBONIFEROUS LIMESTONE rocks of the Mendip Hills to produce the cave system we see today.
- When rainwater falls on limestone it mixes with minerals in the soil to form a weak acid. This dissolves the rock to form a solution of CALCIUM CARBONATE. Small cracks develop into SWALLOW HOLES and surface streams disappear underground. The water gradually enlarges HORIZONTAL BEDDING PLANES and VERTICAL JOINTS within the rock to produce caves.
- Eventually water reaches the WATER TABLE. Below this boundary the rock is completely saturated. The water is therefore forced along the line of the water table forming an underground river – the River Axe.
- When a droplet of calcium carbonate solution hangs from the roof of a cave, some evaporates and the dissolved rock becomes solid again. This simple process creates dramatic CAVE FORMATIONS such as stalagmites, stalactites, flow stones and columns. (See **glossary**.)

N.B. An easy way for children to remember the difference between a stalagmite and a stalactite, is that a stalagmite grows up from the ground and a stalactite hangs down from the ceiling.

## **KEY POINTS: CAVES**

Caves created by water Cave formations Wall colours Legend of the witch Iron Age cave dwellers Cave divers