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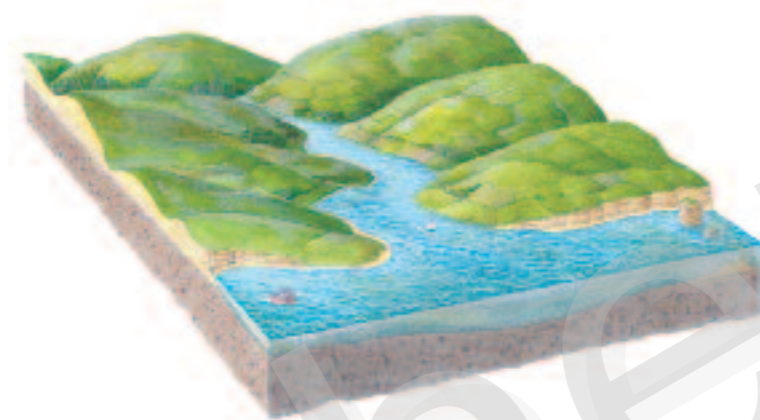
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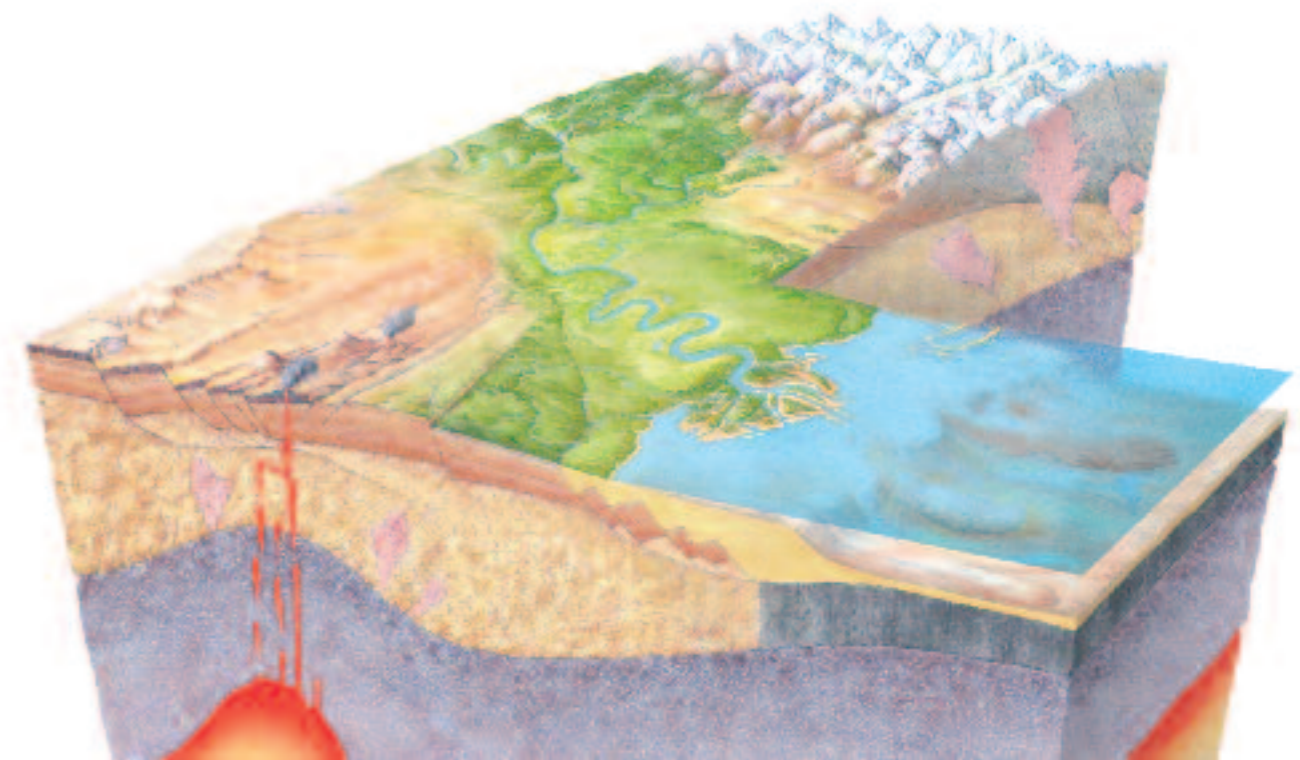
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INTRODUCTION

THE EARTH is a huge, spinning ball of rock. It is one of nine planets that travel round the Sun. It is the only world we know where life exists. Its surface is made up of oceans, which cover more than two thirds of it, and land masses, called continents. A layer of air called the atmosphere, surrounds the Earth.

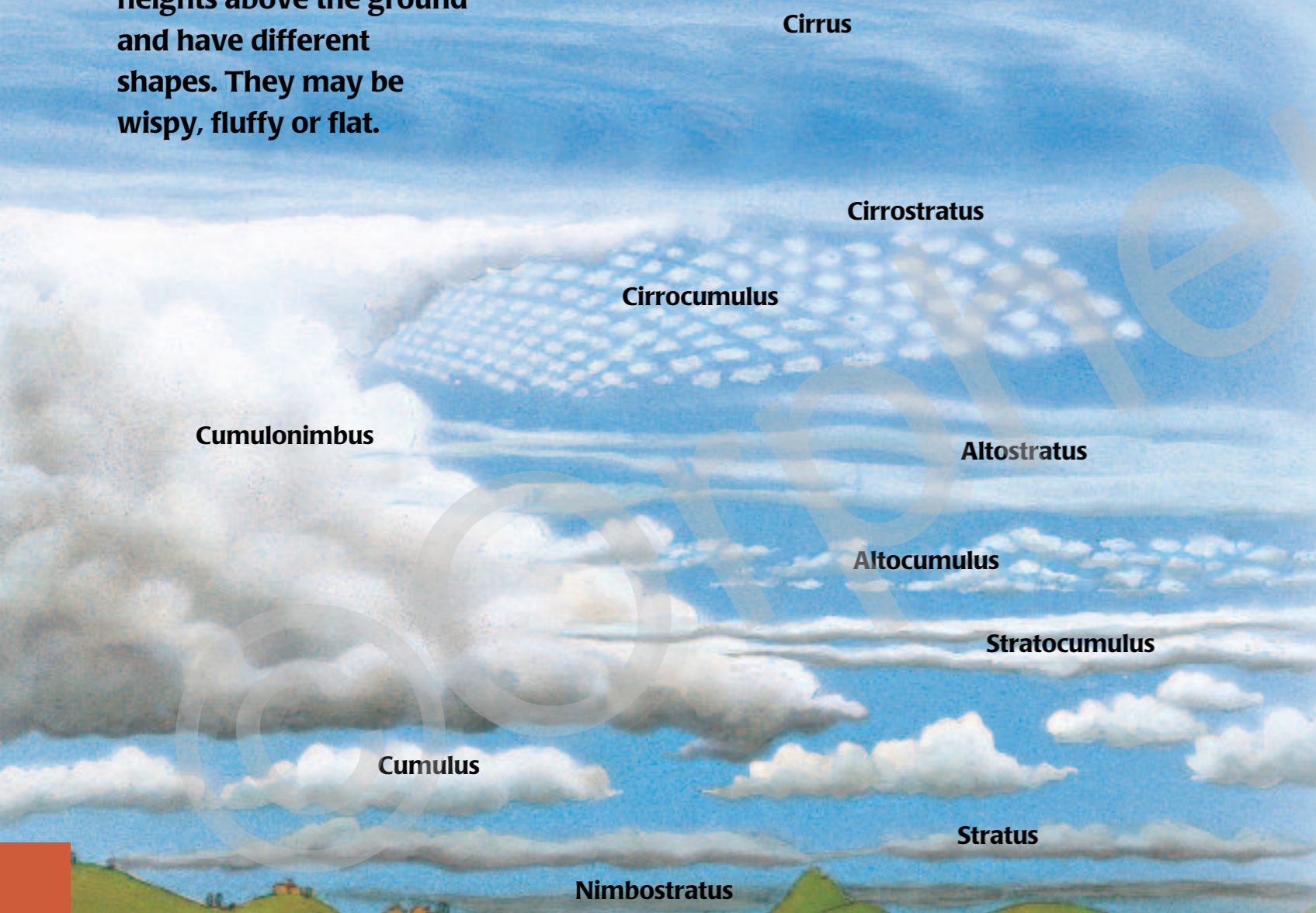


WEATHER AND CLOUDS

WEATHER is a word to describe the what is happening in the air: rain or snow, hot or cold, windy or still. The Sun's heat is vital to our weather. Some regions

are warmer than others. Warm air rises, so cooler air flows in to replace it, producing winds. When air moves, it carries water vapour from one area to another (*see page 22-23*).

Clouds form at different heights above the ground and have different shapes. They may be wispy, fluffy or flat.



CLOUDS IN CLOSE-UP

Clouds consist of millions of tiny water droplets or ice particles. When water vapour in the air condenses, water droplets form around dust particles (*see page 22*). If the temperature falls below freezing, the droplets turn to ice. They float in the air until they become too heavy. They then fall as rain or snow.



A FOGGY DAY

Fog or mist (a thin fog) is cloud that hugs the ground. It is often foggy when moist air cools at night, causing water droplets to form. Fog also forms when moist air is forced to rise over a hill.



At night, the ground cools quickly. Water vapour near the ground condenses, forming dew. This soaks everything – including spiders' webs.



If the temperature falls below freezing, the condensed water vapour turns into a layer of sparkling ice crystals, which we call frost.