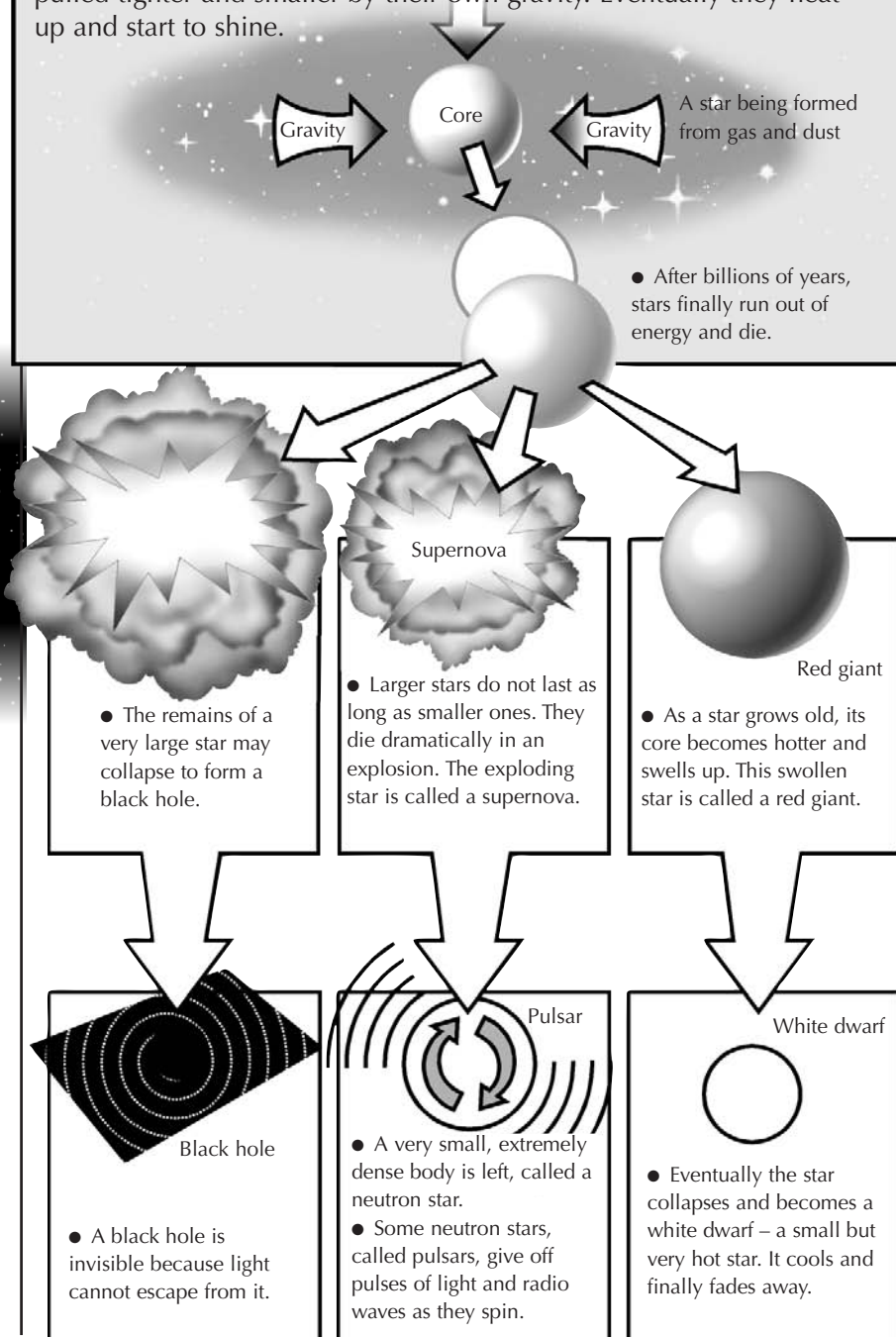


The Stars

The stars in the sky look small because they are so far away. In fact they are huge. Each star is a glowing **ball of gases** held together by gravity. Most of this gas is **hydrogen**. In the hot fury of a star's 'core', or centre, hydrogen reaches a temperature of at least 10 million °C.

The birth and death of a star

Stars are born in clusters. A **cloud of gas and dust** called a **nebula** breaks up over millions of years into smaller clouds which are then pulled tighter and smaller by their own gravity. Eventually they heat up and start to shine.



The heat inside a star changes hydrogen atoms into the atoms of another gas called **helium**.

When this happens there is an '**atomic reaction**' and a flash of energy is given out. Billions of these flashes of energy keep the star hot and make it shine.

The **Sun** is the nearest star to Earth. It is only a middle-sized star but it looks big to us because it is so close – only 150 million km away!