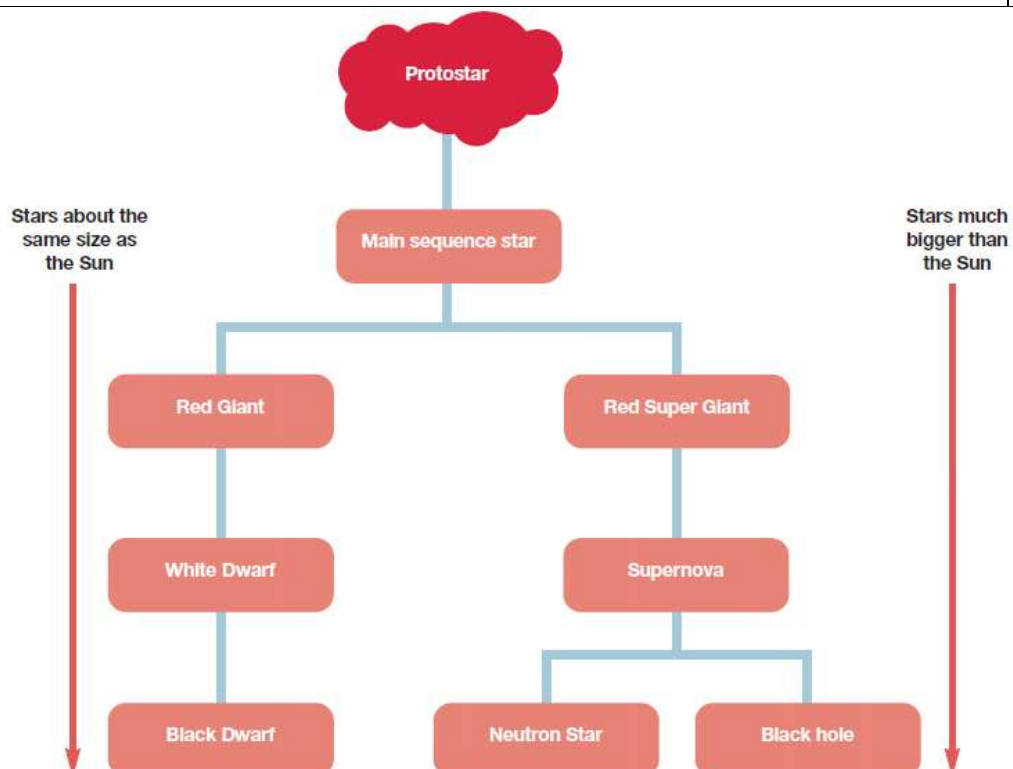


Review P2.6 Nuclear fission and nuclear fusion

<i>Can you...?</i>	😊	😐	😞
P2.6.1 Nuclear fission			
Identify the two main fissionable substances commonly used in nuclear reactors			
Define 'nuclear fission' and describe what must first happen to the nucleus of an atom for fission to occur			
Describe what happens when a nucleus undergoes fission			
Describe or sketch a diagram to show how a chain reaction can happen			
Outline how nuclear fission can be used to generate electricity in a nuclear power station			
P2.6.1 Nuclear fusion			
Define 'nuclear fusion' and identify it as the process that releases energy in stars			
Explain why the early universe contained only hydrogen but now contains a large variety of different elements (but still mainly hydrogen)			
Describe the formation of stars and planets			
Explain why stars are stable during the 'main sequence' periods of their life cycles, in terms of the forces within them			
Describe the life cycle of stars of different sizes (see below)			
Describe how fusion processes produce all of the elements heavier than hydrogen, and how they can be distributed throughout the universe			
Recognise which elements can be formed in stars, and which elements are formed in supernovae			
Compare the uses of nuclear fusion and nuclear fission in generating electricity			



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