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• Describe Rutherford's experiment that showed atoms consisted of a concentrated positive charge with a high mass. Make sure you discuss the observations and the conclusions drawn.

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A stream of positively charged alpha particles was fired at a thin sheet of gold foil. Most of the particles passed straight through or were slightly deflected, but the occasional one was reflected back towards the source.

The conclusion drawn was that atoms consist of mostly empty space with a small, dense, positively charged nucleus.