## How many rails - and what was the cost?

The railway is 13 kilometres long and was originally made up of small rails which were 1 metre long.

The rails sat on stone blocks called padstones; they would need just as many of these padstones as they would the rails.

Why would 4 additional pad stones be required?

How many rails and padstones would they need to build the railway?

Remember that each railway needed 2 tracks, one for each side of the wagon and that there were 2 railways, one for trucks going from Pinxton to Mansfield and one for trucks going from Mansfield to Pinxton. The company who made the rails charged the railway company by weight. In other words, not by how many rails they made but how many tonnes of iron was used to make the rails. We know that each rail weighed 15 kilograms (kg) each.

- **A.** How many rails would we get from 1 tonne of iron (1 tonne contains 1,000 kilograms)?
- **B.** How many tonnes of iron would be needed to make 52,000 rails?
- C. If 1 tonne of iron cost £7.00, how much did the railway company have to pay for the full number of rails that they needed?

