

Don't let Devon go to waste

at school

# Material World

Lesson 1:

Introduction to the Material World



# The story of a steel can (part 1)



Steel is made from **iron ore**. This is mined using enormous drills and sometimes dynamite!

2 billion tonnes of iron ore are mined each year around the world. Most of this comes from China.



The iron ore is crushed and **transported** to a smelting works using trucks or trains.



The ore is mixed with limestone and coke and heated to 1,600°C in a **blast furnace** – this is called smelting.



# The story of a steel can (part 2)



Oxygen is blown into the molten iron to remove carbon (which has come from the coke.)

This produces **steel**.



The steel is rolled out into thin **sheets**, ready to be transported to the next factory.



The steel sheets are **manufactured** into many different objects such as car parts, fridges, cutlery or baked bean cans!

1,665 million tonnes of steel were produced worldwide in 2014 .





# Where does our waste go?



Energy from Waste plant



Landfill site





Manufacturing **Reducing** paper





# Manufacturing plastic



# Manufacturing Recycling aluminium

