

Reading Comprehension – How was steel first made?

People have known how to make metal tools out of ore dug from the ground, for about 5000 years. Copper and tin were the first metals to be used and then they were alloyed to make bronze. Later, it was discovered that if iron ore was heated in a fierce fire, it turned into a hot, pasty metal that could be beaten into shape. This was wrought iron, which could not be made with a sharp cutting edge.

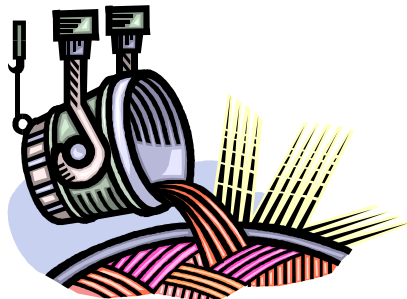
The next step was the discovery that wrought iron, when heated in charcoal and then hammered, was suitable for making sharp tools or weapons. This was the beginning of forged steel.

There was little progress until the fourteenth century, when a metal was found to heat iron so that it melted and could be poured into moulds, where it would harden into the shape of the mould. This was cast iron.

Steel production involves the removal of impurities from iron, and the addition of hardening and strengthening agents. In 1740 a clock-maker from Sheffield, in England, found a way of making steel in small crucibles by melting carbonised wrought iron and freeing it of impurities. From this proceeded the high quality steel for making knives. Knives from Sheffield are still renowned today.

In 1856, Sir Henry Bessemer patented his process of making steel by forcing air through molten iron. This burned away the excess carbon very quickly and reduced the production costs to about 12% of the former level. His invention caused a huge worldwide increase in steel production.

The Bessemer blast furnace has been improved, but steelmakers use similar methods today. Steel is produced all over the world, and has very many uses.



1. COMPREHENSION QUESTIONS – SHORT ANSWER

- A Was bronze used before copper? _____
- B Was carbon essential in making the first steel? _____
- C Which city is famous for its steel knives? _____
- D What is wrought iron suitable for? _____

2. VOCABULARY – SHORT ANSWER

- A Which word means the same as ‘surplus’? _____
- B Which word means the same as ‘shaped by hammering’? _____
- C Which word means the same as ‘mixed together’? _____
- D Which word means the same as ‘porcelain vessels used for heating metals’? _____

3. GRAMMAR & SENTENCE STRUCTURE

- A What part of speech is ‘very’ in the last sentence? _____
- B What kind of phrase is ‘from the ground’ in the first sentence? _____

Punctuate the following sentence:

- C sir henry bessemer was is a key person in the history of the steel industry and is one of the reasons why steel is so readily available to us today

Year 8 Homework Sheet for Week 8

Name: _____

Critical Reading

Includes – Novels, non-fiction books, magazines, newspapers and as negotiated with teacher

Book: _____

Author: _____

In your own words, summarise your reading for this week.

Spelling		
a	b	c
allowed	capital	amendments
border	citizens	anarchy
charges	Democrats	constitution
city	departments	executive
imports	election	guillotine
jury	forestry	independent
oath	liberty	Liberal Party
reading	partition	parliamentary
recreation	shadow	politicians
speaker	statues	referendum

Adding Adjectives

Add the appropriate adjectives to complete these well known similes.

as slow as a snail as _____ as a ghost

as _____ as a hatter as _____ as an arrow

as _____ as ice as _____ as a rake

Common Curriculum Elements

CCE 43 is VISUALISING. You do this everyday by thinking, imagining and drawing. This week's task is fairly easy – depending on your memory! You are to close your eyes and picture your HUMS classroom in your head. On a separate piece of paper, you are to sketch the classroom layout (as if you were a bird looking down from the roof). Good Luck! ☺

Who is the target audience? How can you tell?

Would you recommend this reading to your friends?

Why/why not?

Parent Comment & Signature: _____

Teacher Comment & Signature: _____