

**Melting Point**

1535°C

**Boiling Point**

2750°C

**Density**7.9 g/cm<sup>3</sup>**Appearance****Other Physical Properties**

Iron is malleable and ductile.

**Chemical Properties**

Iron reacts slowly with air, and it reacts with dilute acids.

**Compounds**

Compounds of iron are usually either green or reddish brown.

**Uses**

Iron is mixed with carbon and sometimes other elements to form alloys called steels, which are the most widely used metals.

**Notes**

Iron is extracted from its ores (commonly hematite or magnetite, both of which are forms of iron oxide) by smelting them in blast furnaces.



▶ IRON IS EXTRACTED FROM ITS ORES IN A BLAST FURNACE. OXIDES OF IRON ARE USUALLY HEATED WITH COKE, WHICH IS MAINLY CARBON, AND LIMESTONE. THE IRON PRODUCED IS USUALLY CONVERTED TO STEEL BEFORE IT IS USED.

PHOTO: National Park Service



▶ THIS BLACKSMITH HAMMERS A PIECE OF IRON INTO THE SHAPE HE REQUIRES. LIKE OTHER METALS, IRON CAN BE FORCED INTO DIFFERENT SHAPES; THAT IS, IT IS MALLEABLE.

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