



Attractive alloys

Background knowledge

An alloy is a solid mixture of metals, or of metals and nonmetals. Brass is an alloy of copper and zinc. It is used to make screws that do not rust. Bronze is an alloy of copper and tin. It is used to make bells and statues. Pennies are alloys made mostly of zinc and coated with copper. Nickels are made mostly of copper, and coated with nickel to make them silver. Stainless steel is an alloy of iron and chrome that is strong and slow to rust. Many baseball bats, golf clubs, and tennis rackets are made of alloys, which manufacturers use to make them strong but lightweight.

Science activity

Magnets will attract only the metals iron, nickel, and cobalt. The five objects below are all made from different alloys. Place a check mark in the box beside each one that you think will be attracted to a magnet.



Science investigation

Collect samples of different solid objects. Can you tell by looking at them if they are alloys? Examine each object. Observe the properties of the object and record this information in a data table with three columns. In the first, record the name of the object. In the second, make a check mark if you think it is an alloy. In the third, explain your decision.