

They to a certain  
point. with  
ferromagnetic  
materials



**ASSIGN  
BUSTER**

They use metal to make coins for certain reasons, in ancient greece the gods made the coins out of metal. The reason was because coins were of higher value then just paper, or stone. They were also more durable. Unlike wood they wouldn't burn up in a fire. The coins couldn't be made out of stone or wood because the possibility of them breaking/shattering was too high. Stone was also to heavy for them to carry and weigh. SO metal was a all around better option.

Magnets can pull lots of weight, the one I am using will pull 17. 5 pounds of weight. The world's strongest magnet pulls 45 Teslas.

One Tesla equals 10, 000 gauss. The world's strongest is 500, 000 times stronger than the all of Earth's pull. All coins have different types of metal in them not all have only one type of metal. Pennies in the 1793-1837 were made of pure copper. Now pennis are only copper plated being mainly Zinc. The comostions are currently 97.

5% Zinc and 2. 5% copper. The composition of a quarter is 8. 33% Nickel, and the rest is 91. 67% copper. Ferromagnetic material is material that is magnetic. If something is ferromagnetic it can transfer the charge of a magnet.

As in my science fair the magnet is connected to the hanger and the penny is touching the hanger. The hanger is metal so it can transfer the magnetic pull and will hold the penny up to a certain point. With ferromagnetic materials they will only hold things up to a certain weight.

Depending on the magnet and how much weight it can pull, and how well the magnetic pull will be transferred it will all vary. Magnetic Alloys are combinations of various metal from the periodic table of elements. It has to contain at least one or three magnetic elements. An alloy has to contain at least one of these things for it to be considered an alloy.

The things that it has to contain are iron, nickel or cobalt. Magnet Alloys have become more common in a special forged steel.