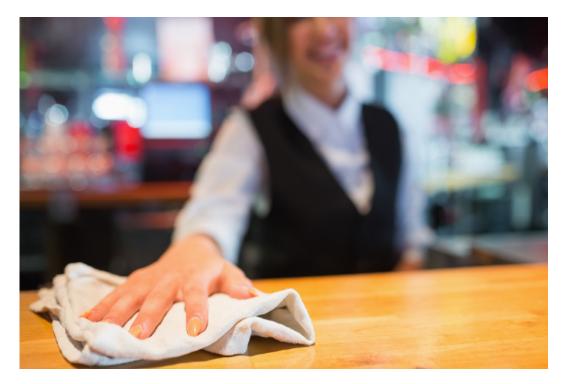


When you rub materials together, some materials are more likely to give up their electrons. Other materials hold on more tightly to their electrons.





## Triboelectric Series

When two substances rub together, which substance is more likely to become positively or negatively charged?

The Triboelectric Series ranks materials in order from most positively charged to most negatively charged.

This means that if two materials from the list are rubbed together, the one higher up the list is more likely to give up its electrons to the other one and become more positively charged.

So if you rub a balloon made of rubber on your hair, the atoms from your hair will give up their electrons to the balloon. Your hair will become more positively charged and the strands will repel each other. If you were to hold the negatively charged balloon near some more positively charged pieces of paper you might find they will stick together.







## + charged

polyurethane foam hair, oily skin dry skin, nylon glass acrylic leather rabbit's fur quartz

mica cat's fur silk aluminium paper cotton wool

## 0 charged

steel wood amber wax polystyrene rubber balloon resin copper, nickel brass, silver rayon synthetic rubber polyester plastic wrap sticky tape vinyl silicon teflon

- charged

silicone rubber

ebonite