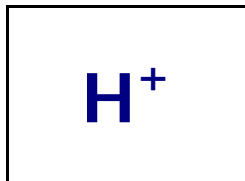


Creating Ionic Compounds

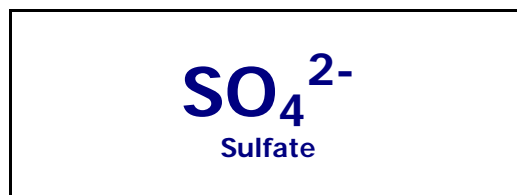
Ions are atoms or groups of bonded atoms that have lost or gained an electron and are thus charged. Compounds often form when ions of opposite charges bond together. This activity will help us explore how the ions combine.

For our model the size of each card indicates the number of charges on the ion. This is also seen by the number in front of the plus or minus sign. If no number is seen then the charge is one.

For example, a hydrogen ion has one positive charge,



while a sulfate ion has two negative charges.



When ions come together to form a compound the charge on the overall compound must be zero—the charges on the two ions balance each other.

Demonstrate this idea using a hydrogen ion and a chloride ion.

 Draw what this looks like below.

Now do the same for a sodium ion and a chloride ion.

For each of those two examples you found the ions were in a one-to-one ratio. Explore the following compounds which may or may not be in a one-to-one ratio. For each compound you create draw your model.

Calcium carbonate

Potassium chromate

Aluminum oxide

Aluminum sulfate

Calcium hydroxide

Strontium nitrate