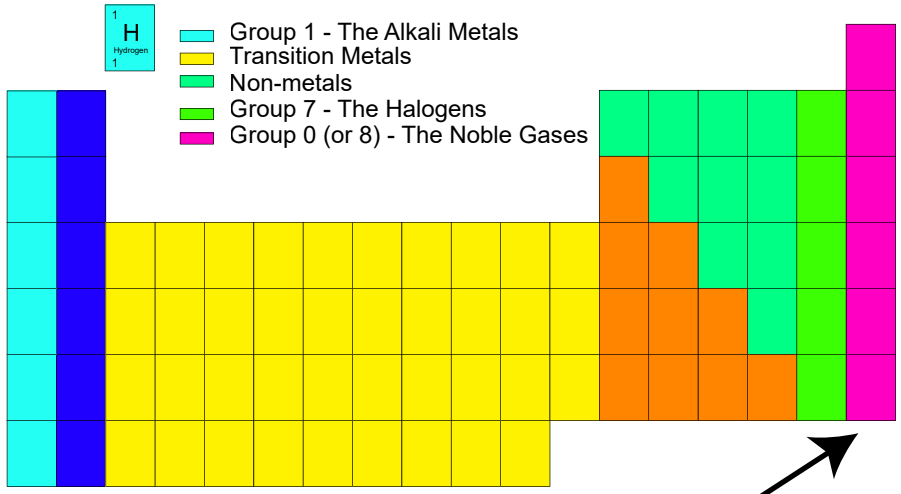
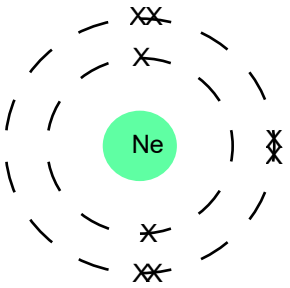
Where are the Noble Gases?



HERE!!! ON THE FAR RIGHT!!!!

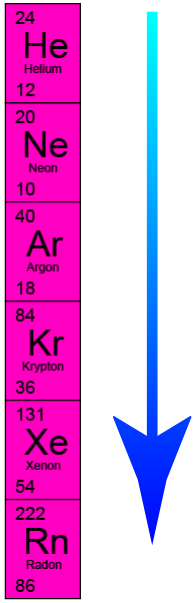
What's so Special About Them?

They don't react! When elements react they do so to get a full outer shell. Look at the diagram of neon below:



OMG! It's already got a full outer shell - therefore it doesn't react. As they can't react they can't form bonds and therefore always exist as single atoms. They're all colourless gases.

What happens to their physical properties as you go down the group?

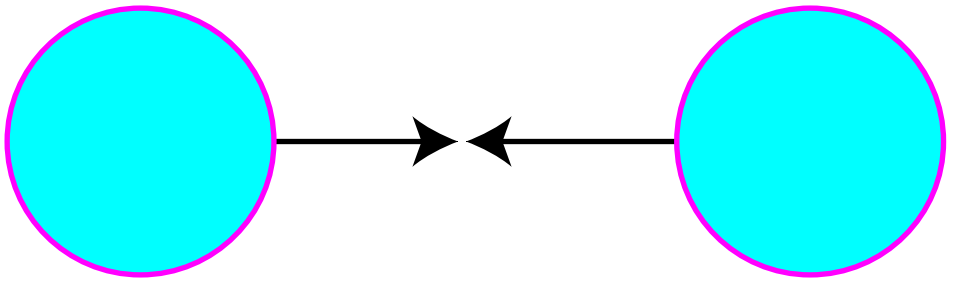


Their atomic mass increases
Their boiling point increases
Their density increases

Why does their boiling point increase?

An increase in atomic number means that there are more electrons, this increases the strength of the forces holding them together.

What's an Intermolecular Force?



Intermolecular forces are the forces between separate particles