Periodic Table Family Facts

Watch the following video: [Families of the Periodic Table](https://www.youtube.com/watch?v=P0dnNIRlIdw)

Use the video to take notes, do NOT write everything that is posted in the video. Focus on physical properties and reactivity

| **Group Number & Family Name** | **Physical Properties** | **Reactivity**  **(very, fairly, sort of, not at all)** |
| --- | --- | --- |
| **1- Alkali Metals** |  |  |
| **2- Alkaline Earth Metals** |  |  |
| **3 to 12- Transition Metals** |  |  |
| **17-Halogens** |  |  |
| **18-Noble Gases** |  |  |
| **Lanthanides**  **(row below table)** | Also called the rare earth metals, because they’re rare  High MP and BP  Used in light bulbs and TV screens as phosphors | Usually intermediate in reactivity between alkaline earth metals and transition metals |
| **Actinides**  **(second row below table)** | Many have high densities  Most are radioactive and manmade  Melting points vary, but usually higher than alkaline earth metals  Used for nuclear power/weapons, radiation therapy, fire alarms | Reactivity varies greatly |
| **Hydrogen ( a true individual)** | Has properties unlike any other element  Diatomic – H2  Can form either a +1 or -1 charge | Relatively unreactive unless energy is added (under most conditions) – it can form explosive mixtures with oxygen (as it did in the Hindenburg explosion) |
| **Non-metals in mixed groups**  **13-16** | Brittle  Poor conductors of heat and electricity  Low density  Low MP and BP (many are gases)! | Reactivity varies- 13 low, 16 higher |
| **Metalloids- along the zig-zag line in groups 3-16** | Some metalloids are shiny (silicon), some are not (gallium)  Metalloids tend to be brittle, as are nonmetals.  Metalloids tend to have high MP and BP like metals.  Metalloids tend to have high density, like metals.  Metalloids are semiconductors of electricity – somewhere between metals and nonmetals. This makes them good for manufacturing computer chips. | |