An investigation of the relationship between ionization energy and atomic weight for the Group 17 elements.

Table I: Atomic weight and Ionization energy of the Group 17 elements.

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| **Element Symbol** | **Atomic Weight (amu)** | **Ionization Energy (kj/mol)** |
| F | 18.998403163 | 1681.0 kj/mol |
| Cl | 35.45 | 1251.2 kj/mol |
| Br | 79.904 | 1139.9 kj/mol |
| I | 126.90447 | 1008.4 kj/mol |
| At | 210 | 890 kj/mol |
| Ts | 294 | Unknown |

There is a decrease in ionization energy of the Group 17 elements from F to Ts. Ionization energy decreases as you go down the periodic table, and this applies to Group 17.