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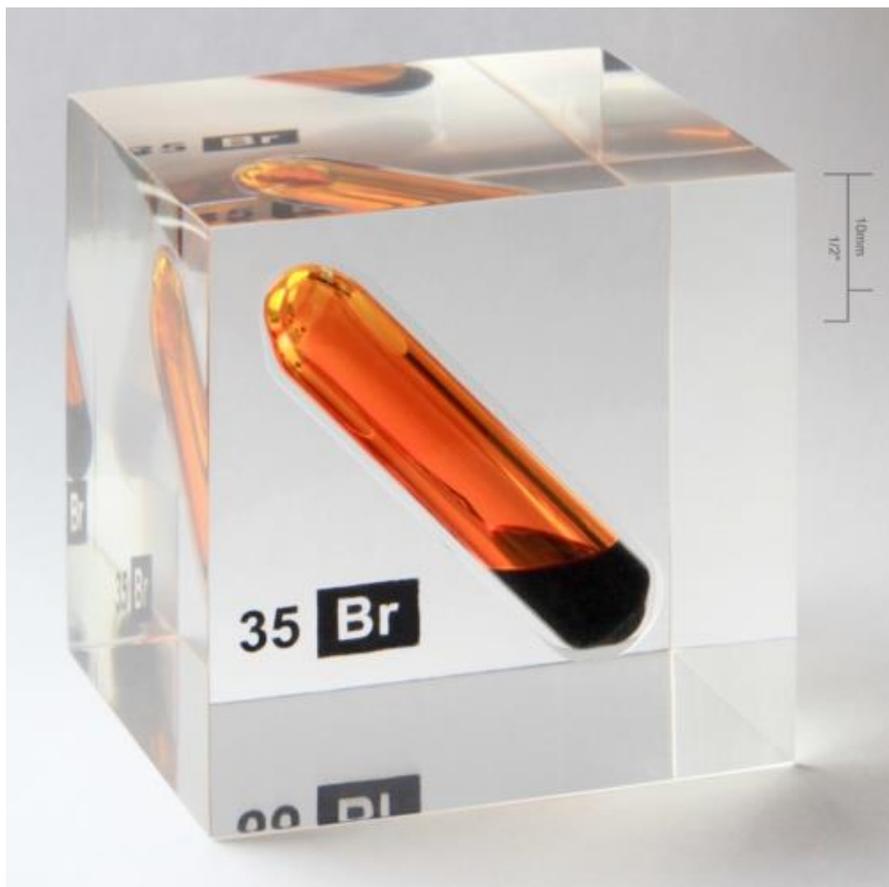
GROUP 7 – PHYSICAL PROPERTIES



- yellow gas
- very reactive
- toxic



- green gas
- very reactive
- toxic

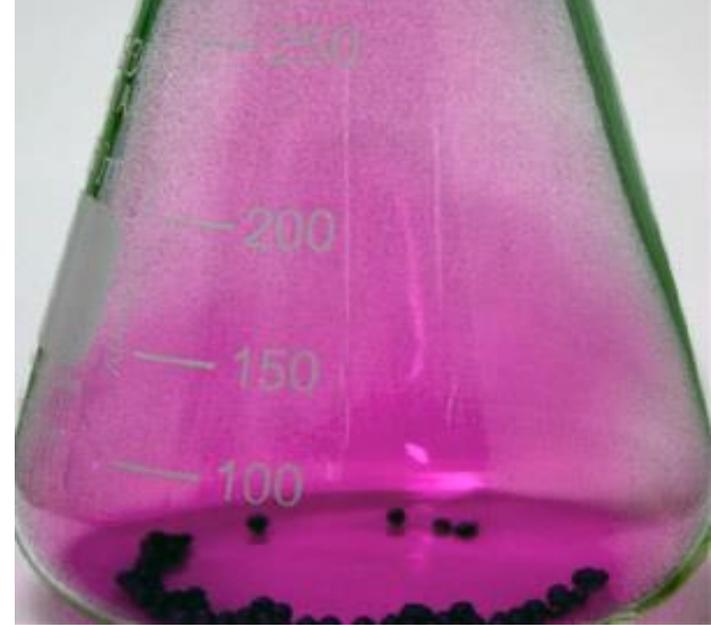


- orange liquid
- very reactive
- toxic



- often used as a solution in water - bromine water, Br₂(aq)

- easily turns into purple vapour on heating



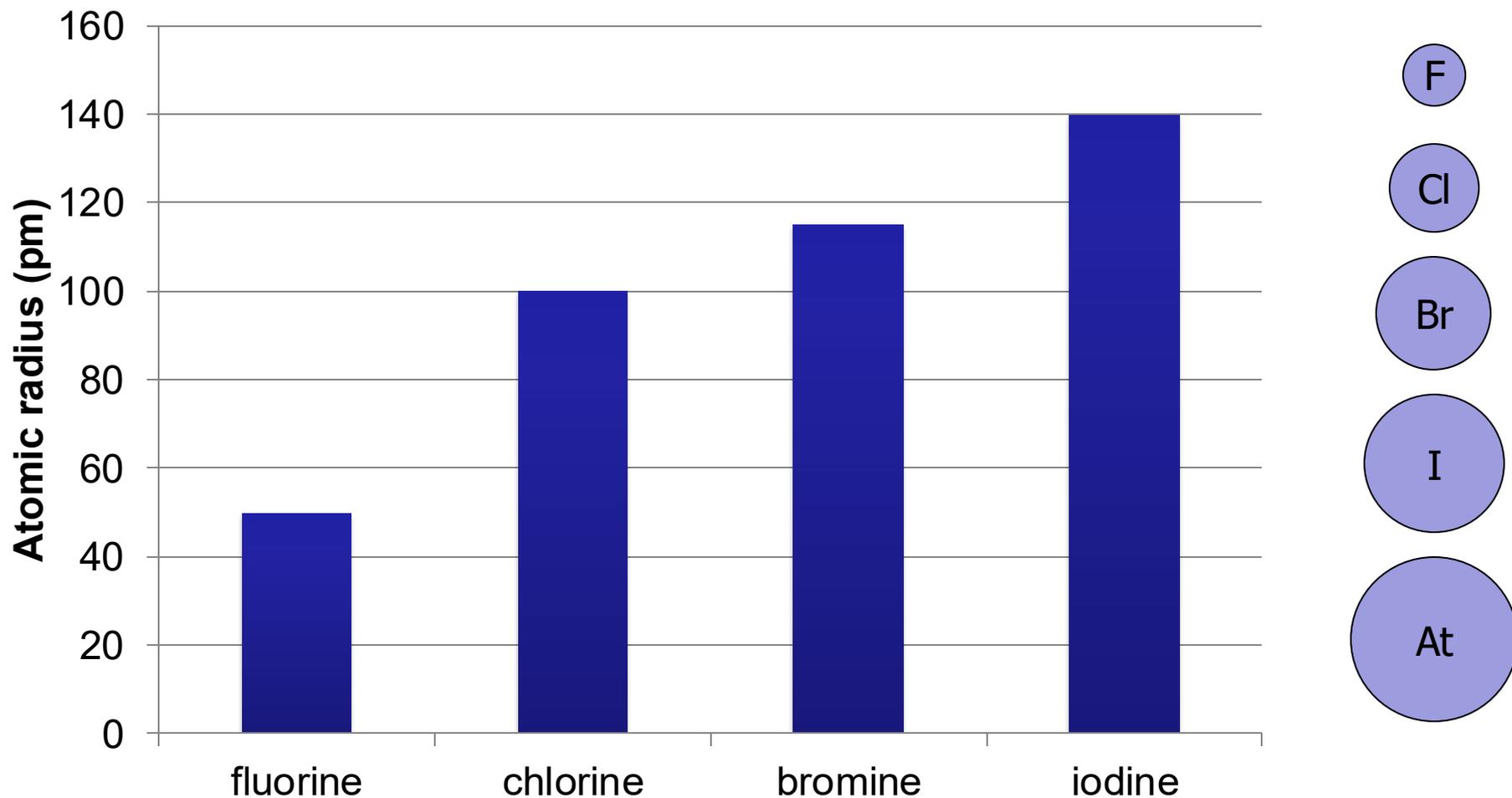
- used in solution as antiseptic



- grey crystals
- reactive
- toxic



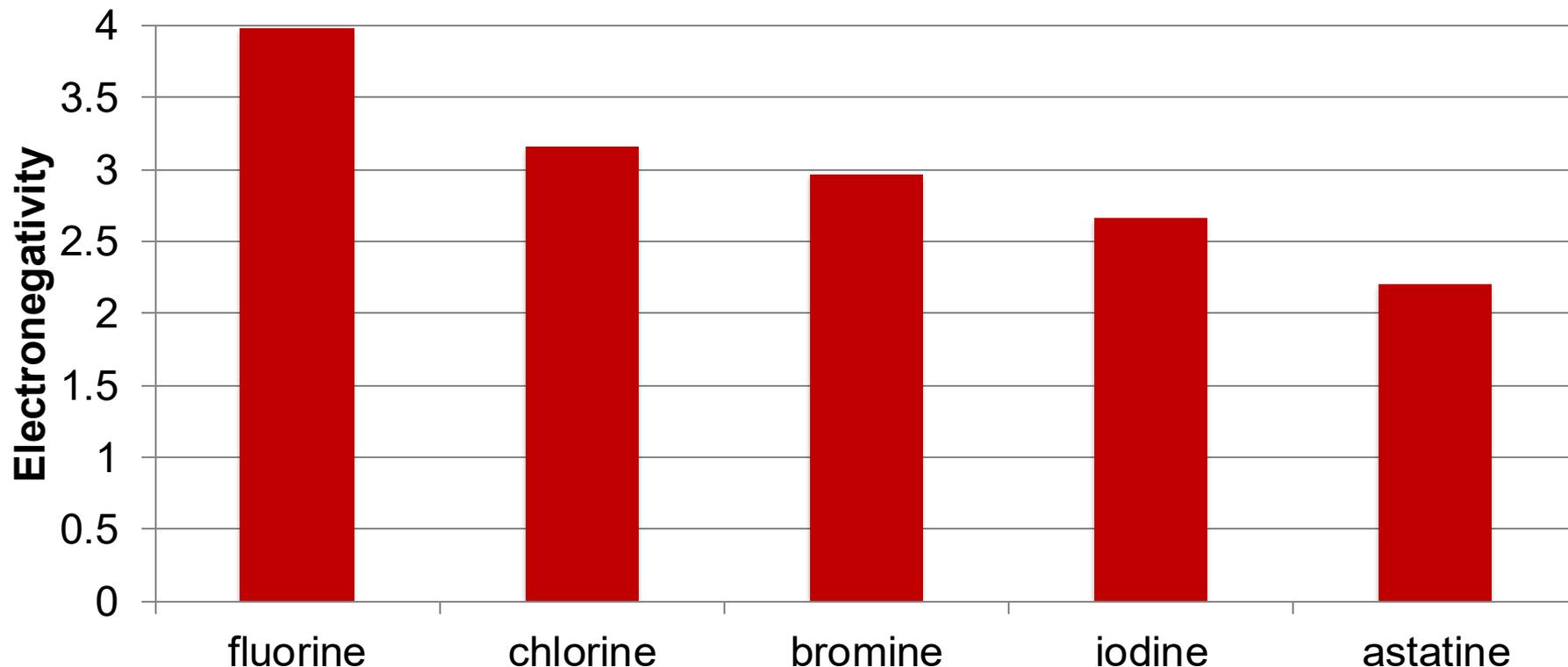
ATOMIC RADIUS



- more electron shells
- so bigger atoms

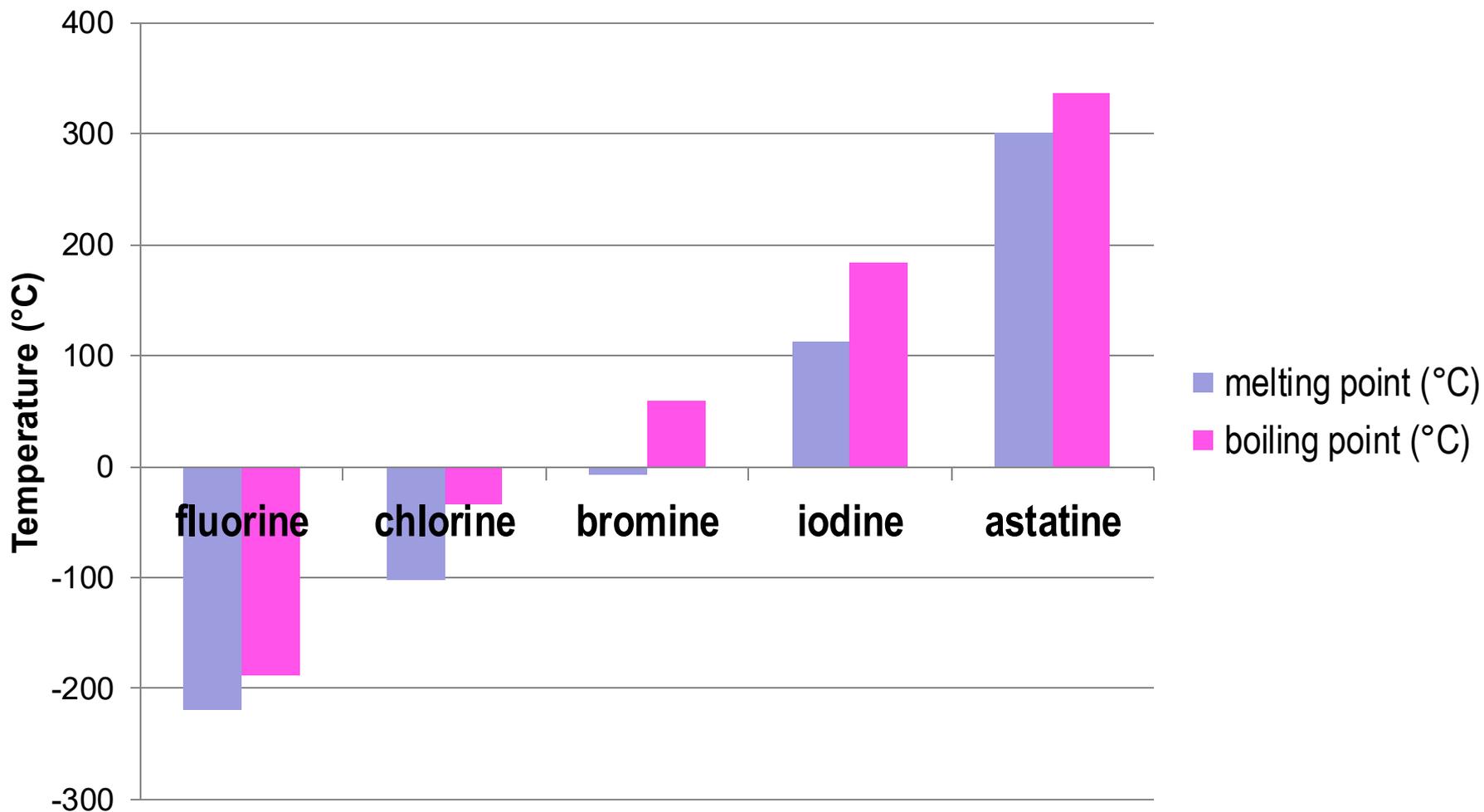
ELECTRONEGATIVITY

POWER OF AN ATOM TO ATTRACT THE 2 ELECTRONS IN A COVALENT BOND



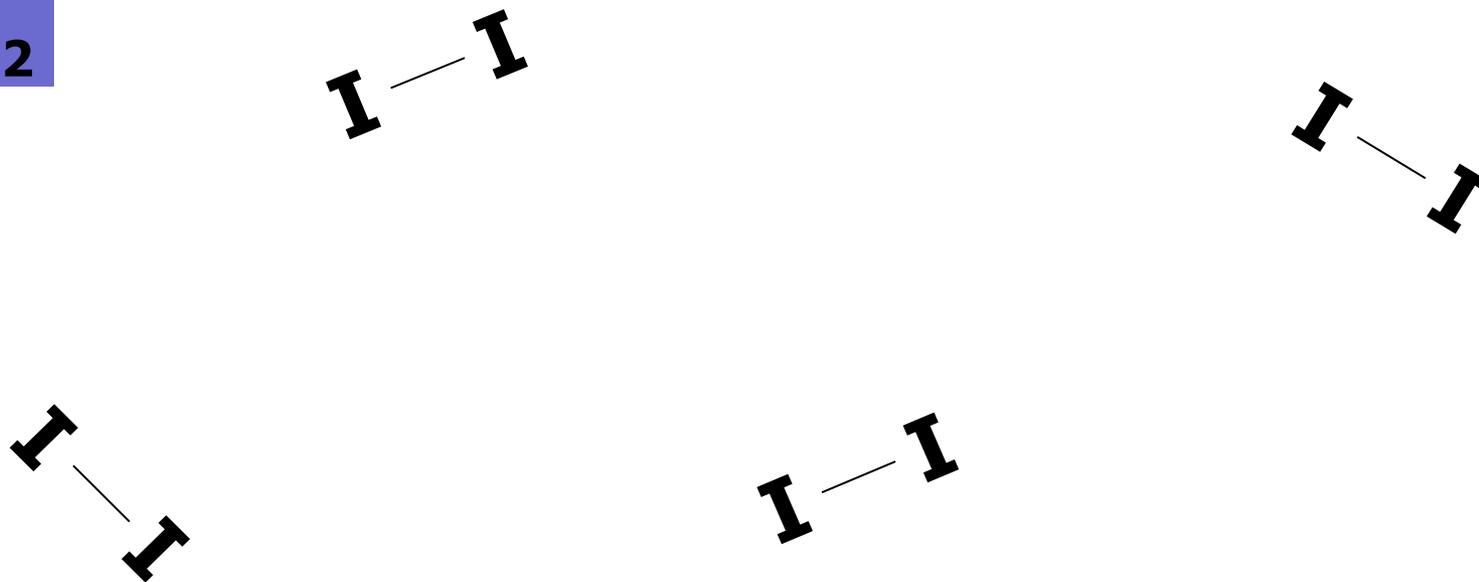
- bigger atoms
- more shielding
- weaker attraction between nucleus and 2 electrons in covalent bond

MELTING & BOILING POINTS

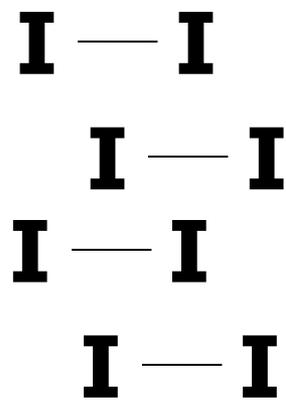


**bigger molecules → more van der Waals' forces → higher mpt/bpt
between molecules**

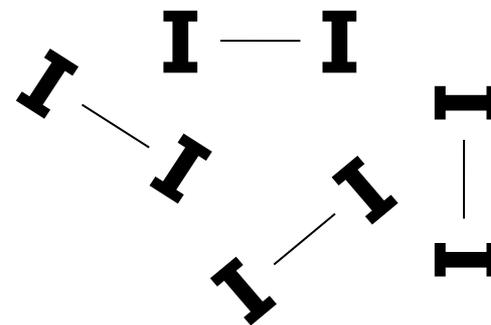
GAS I₂



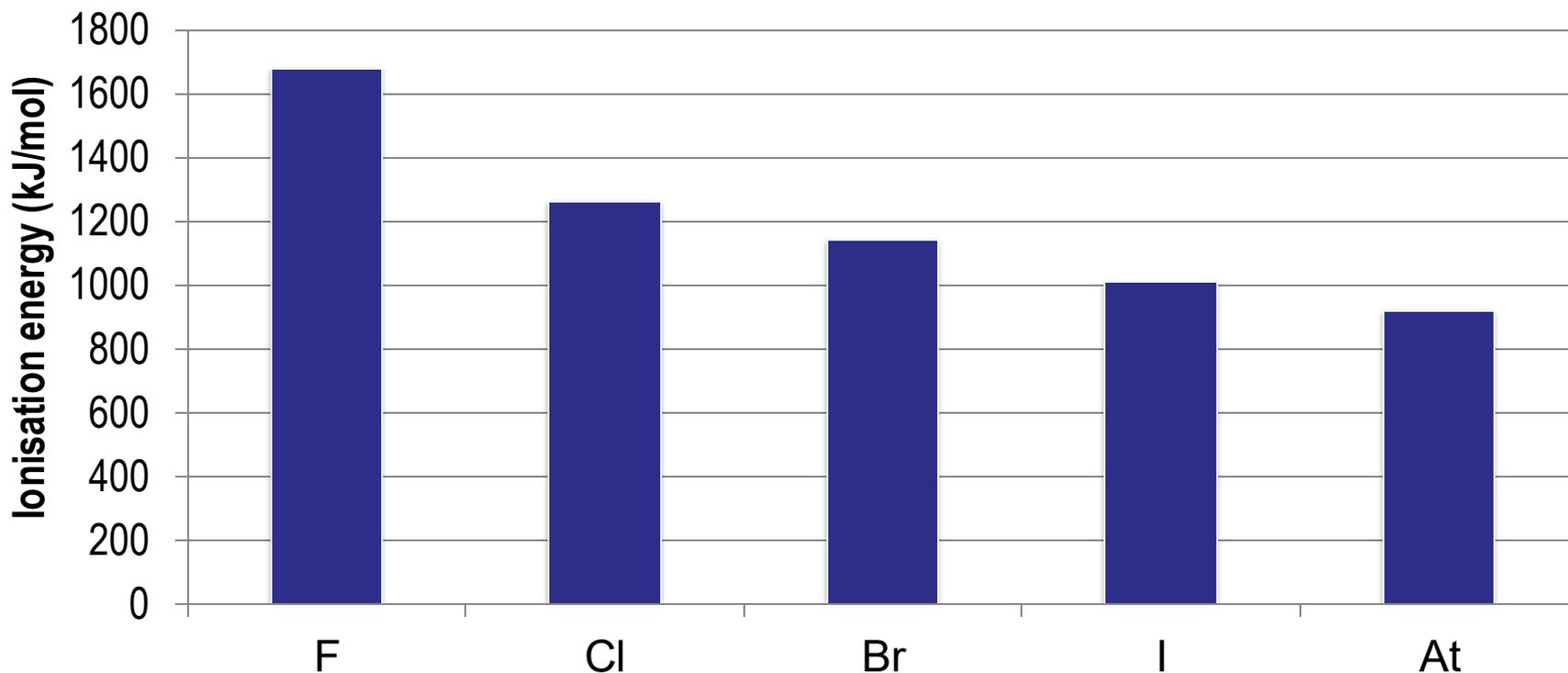
SOLID I₂



LIQUID I₂



1st IONISATION ENERGY



- atoms get bigger
- more shielding
- therefore weaker attraction from nucleus to electron in outer shell