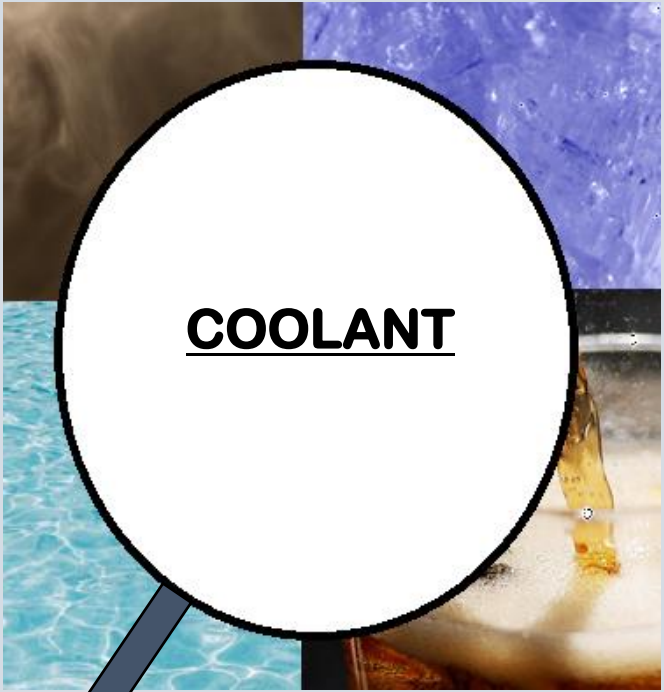
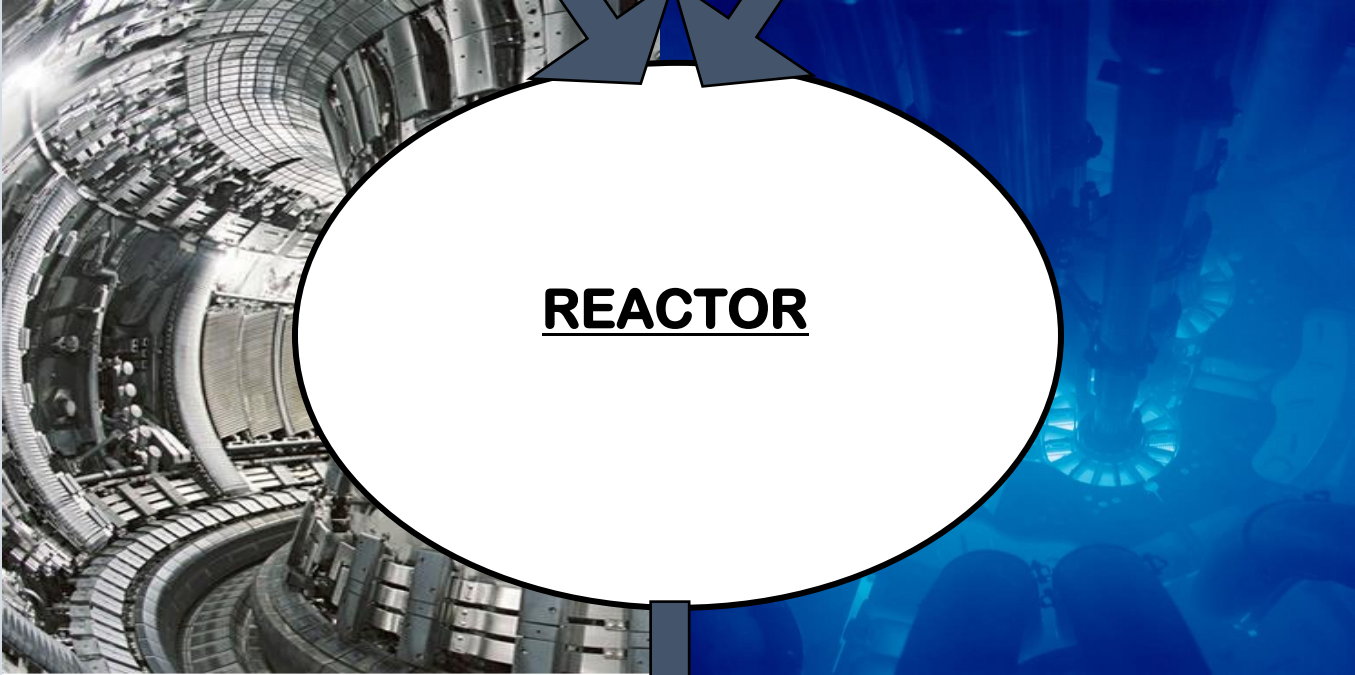




FUEL



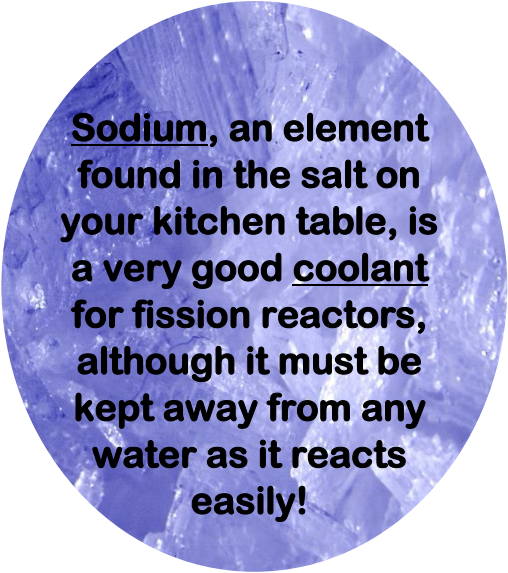
COOLANT



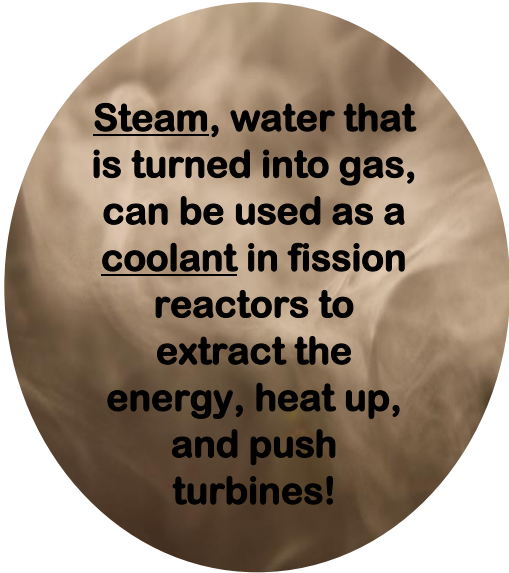
REACTOR



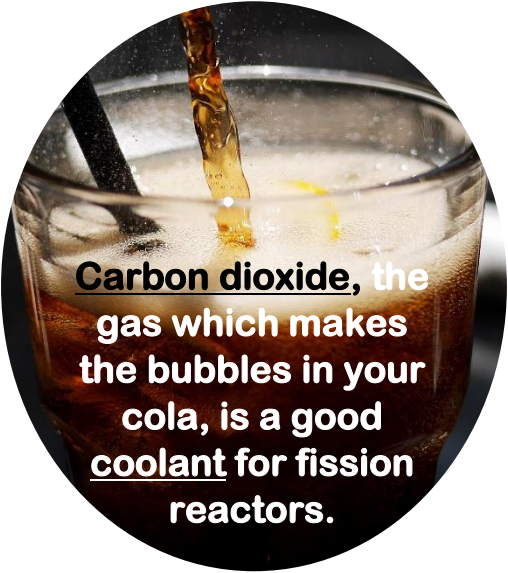
WASTE



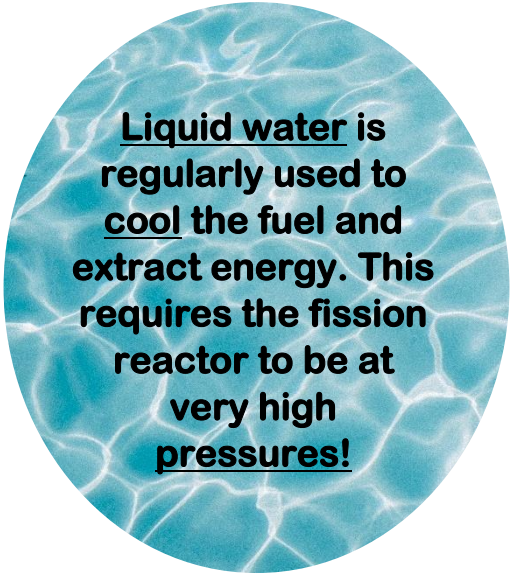
Sodium, an element found in the salt on your kitchen table, is a very good coolant for fission reactors, although it must be kept away from any water as it reacts easily!



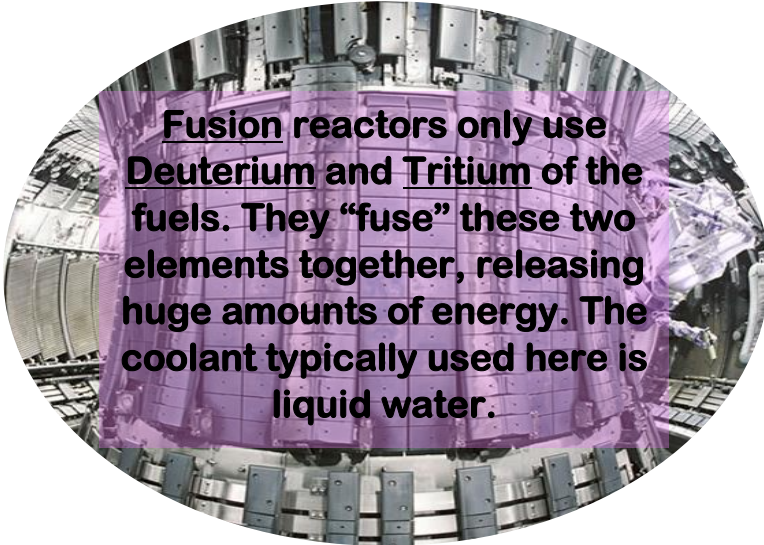
Steam, water that is turned into gas, can be used as a coolant in fission reactors to extract the energy, heat up, and push turbines!



Carbon dioxide, the gas which makes the bubbles in your cola, is a good coolant for fission reactors.



Liquid water is regularly used to cool the fuel and extract energy. This requires the fission reactor to be at very high pressures!



Fusion reactors only use Deuterium and Tritium of the fuels. They “fuse” these two elements together, releasing huge amounts of energy. The coolant typically used here is liquid water.



Fission reactors can use Uranium and Thorium of the fuels, pulling these elements apart to release the energy within their atoms. They can use all the above coolants to extract the energy and keep the reactor cool.



Helium is a waste product of fusion reactors. Helium is an inert gas and can be used in other industries to make things like balloons!



Fission waste can be very radioactive and so is trapped in glass, then buried in deep underground mines to stop anyone going near it!



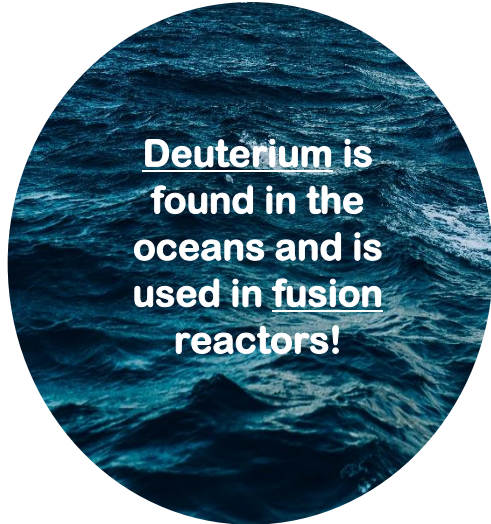
Some wastes can be reused in other reactors to help incinerate the waste and reduce how much there is!



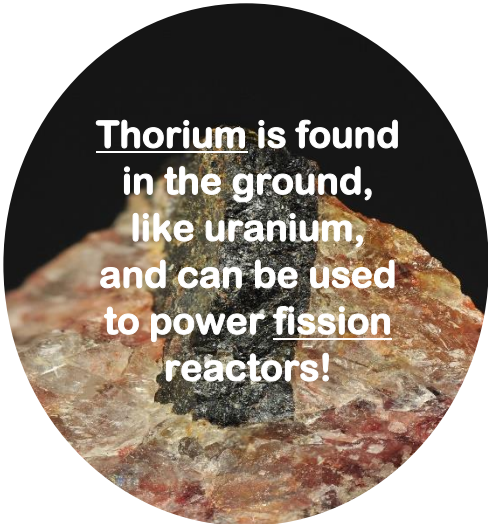
The waste can be reprocessed into other fuels or into less radioactive waste, reducing potential risk to future generations!



Uranium comes in yellow powder and is the most common fuel in fission reactors!



Deuterium is found in the oceans and is used in fusion reactors!



Thorium is found in the ground, like uranium, and can be used to power fission reactors!



Tritium is an element used in fusion reactors. It has been used to make glow-in-the-dark watches!