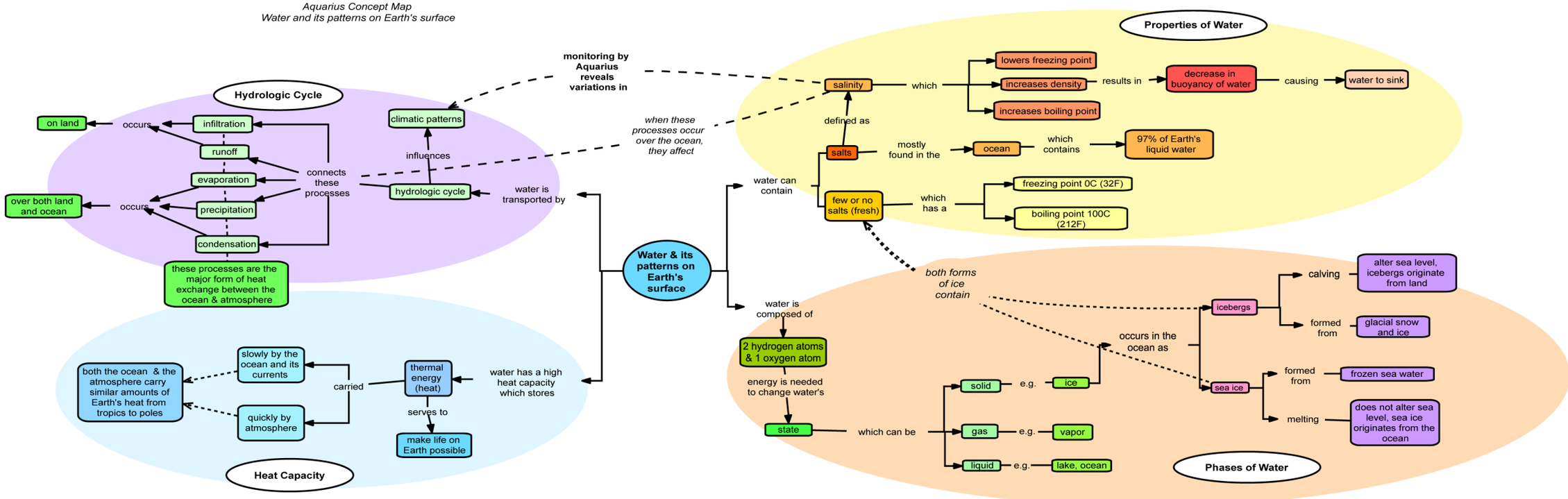
Aquarius Concept Map
Water and its patterns on Earth's surface
Water & its patterns on Earth's surface
Hydrologic Cycle
on land
occurs
infiltration
runoff
evaporation
precipitation
condensation
over both land and ocean
occurs
connects these processes
these processes are the major form of heat exchange between the ocean & atmosphere
climatic patterns
influences
hydrologic cycle
water is transported by
monitoring by Aquarius reveals variations in
when these processes occur over the ocean, they affect
Properties of Water
salinity
which
lowers freezing point
increases density
increases boiling point
results in
decrease in buoyancy of water
causing
water to sink
defined as
salts
mostly found in the
ocean
which contains
97% of Earth's liquid water
water can contain
few or no salts (fresh)
which has a
freezing point 0C (32F)
boiling point 100C (212F)
both forms of ice contain
water is composed of
2 hydrogen atoms & 1 oxygen atom
energy is needed to change water's
state
which can be
solid
e.g.
ice
gas
e.g.
vapor
liquid
e.g.
lake, ocean
occurs in the ocean as
icebergs
calving
alter sea level, icebergs originate from land
formed from
glacial snow and ice
sea ice
formed from
frozen sea water
melting
does not alter sea level, sea ice originates from the ocean
Phases of Water
Heat Capacity
both the ocean & the atmosphere carry similar amounts of Earth's heat from tropics to poles
slowly by the ocean and its currents
quickly by atmosphere
carried
thermal energy (heat)
serves to
make life on Earth possible
water has a high heat capacity which stores