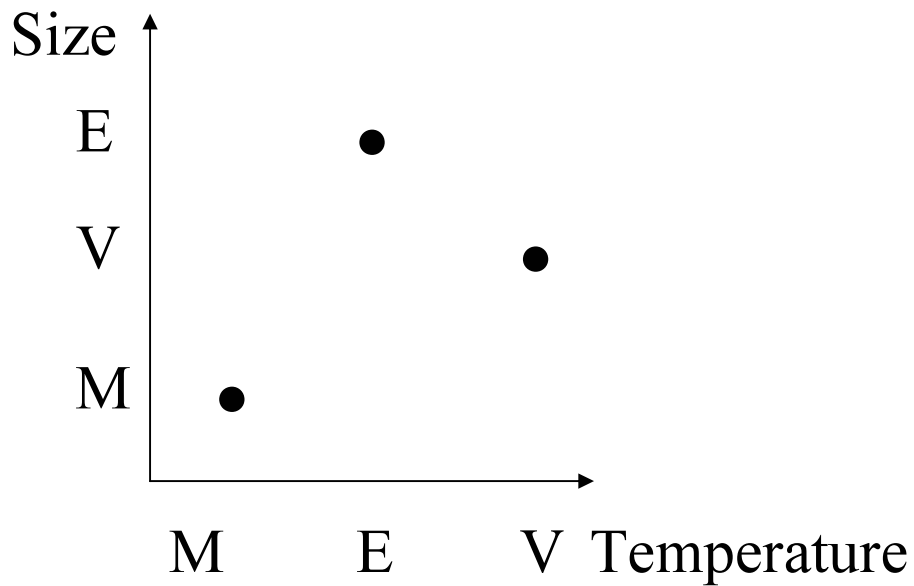


Why is there so much water?

What keeps the water on the planet?



ATMOSPHERE

N_2

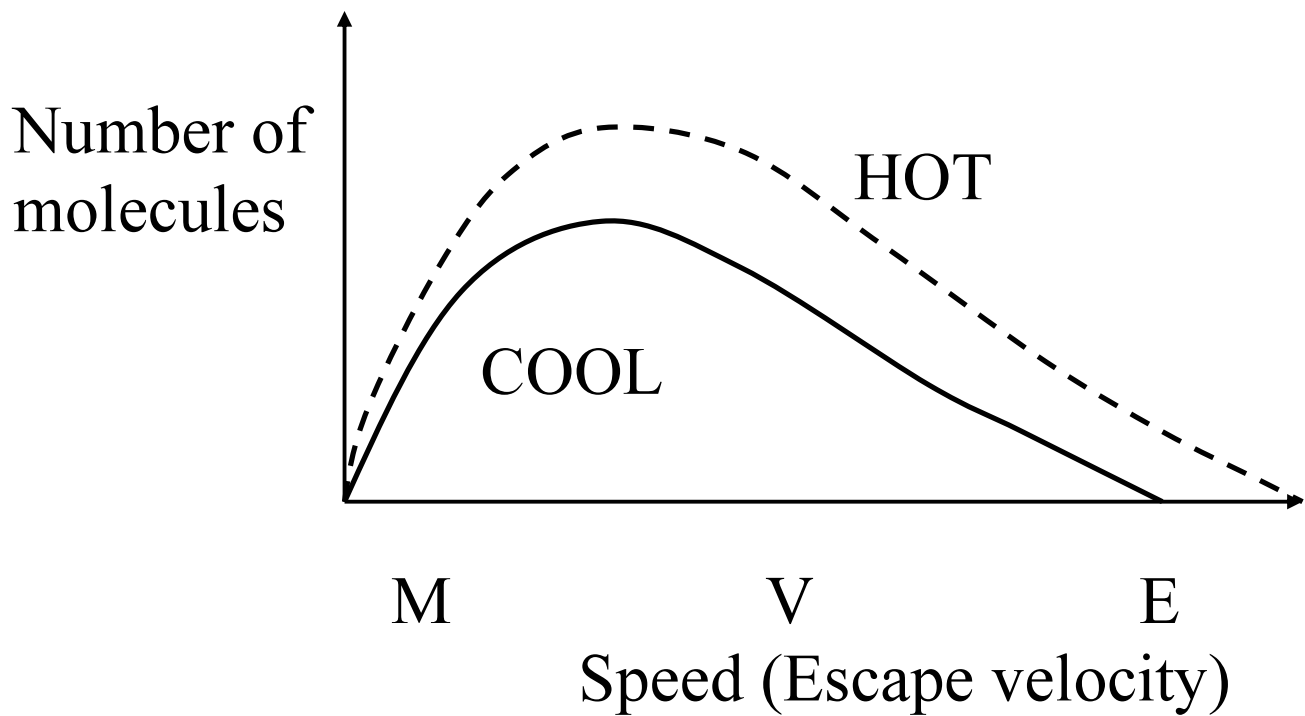
O_2

CO_2

He

H_2O

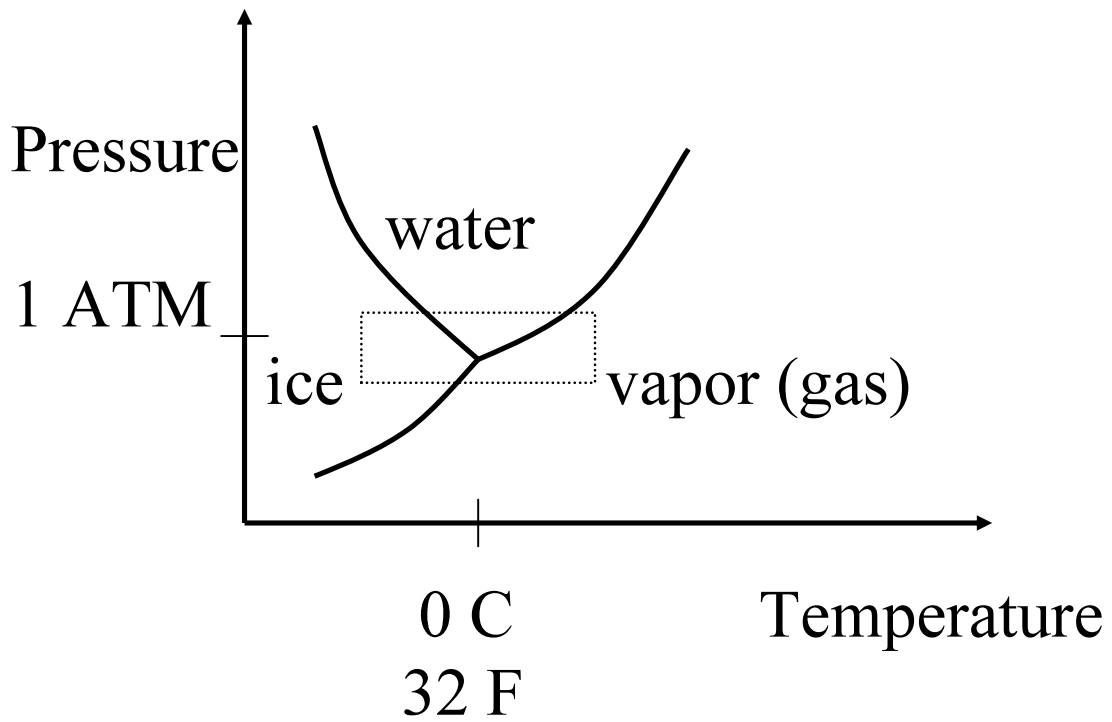
...



The speed allows molecules to escape the planet, thus it is called the escape velocity.

(Remember!!Molecules behave like cars)

Why is there liquid water on Earth and not on other planetary objects?



Water reservoirs on Earth

RESERVOIR	RESIDENCE TIME	% of water
OCEAN		97
GLACIERS	100,000 years	2
LAKES	~ 216 years (Erie)	0.02
STREAMS	~ 1 year	0
GROUNDWATER	years to millions of years	0.6
BIOSPHERE	10's and 100's of years	0
ATMOSPHERE	hours to days	0