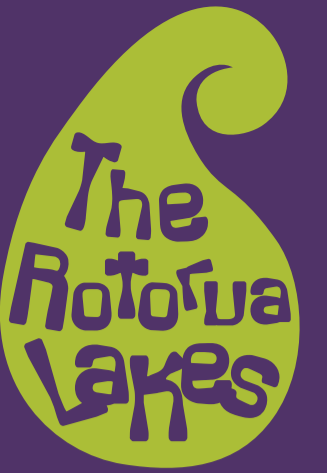


# Lake density



Have you noticed in summer when you swim out into a lake and put your feet down the water is colder?  
This is because cold water sinks below the warm water (cold water is more dense).

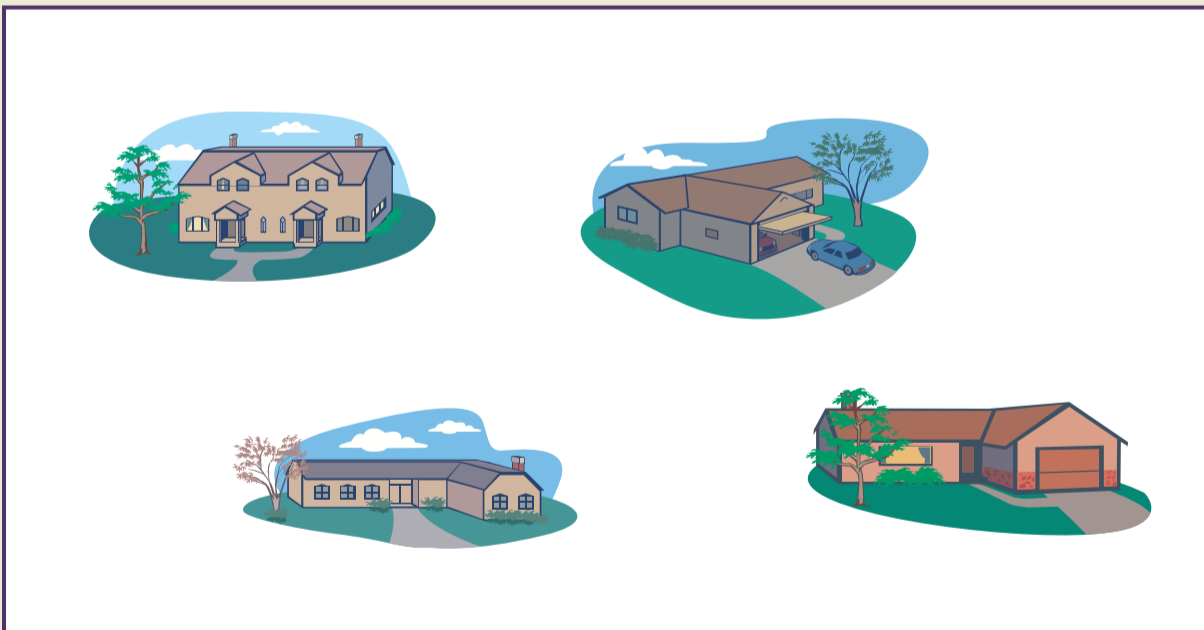


Did you know that water changes density with changes in the temperature?  
Water is at its most dense at 4°C – about the temperature inside your fridge.

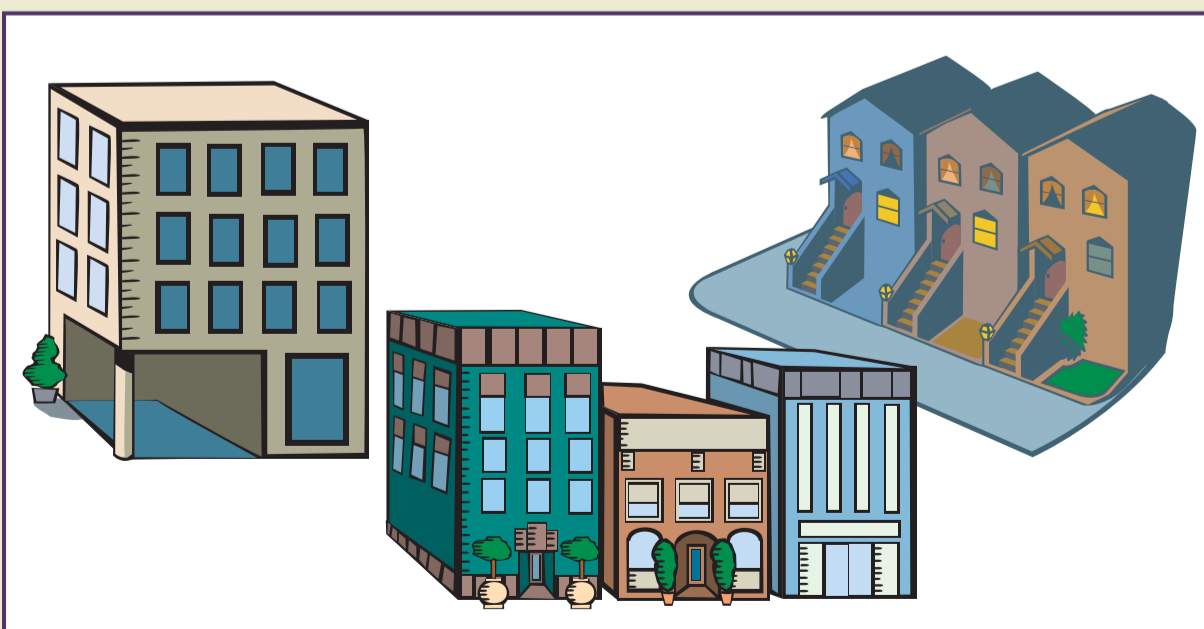
**Density** is how many particles (small pieces) are squashed into a space. Think about the housing example below:



Low density housing is like living in the country.

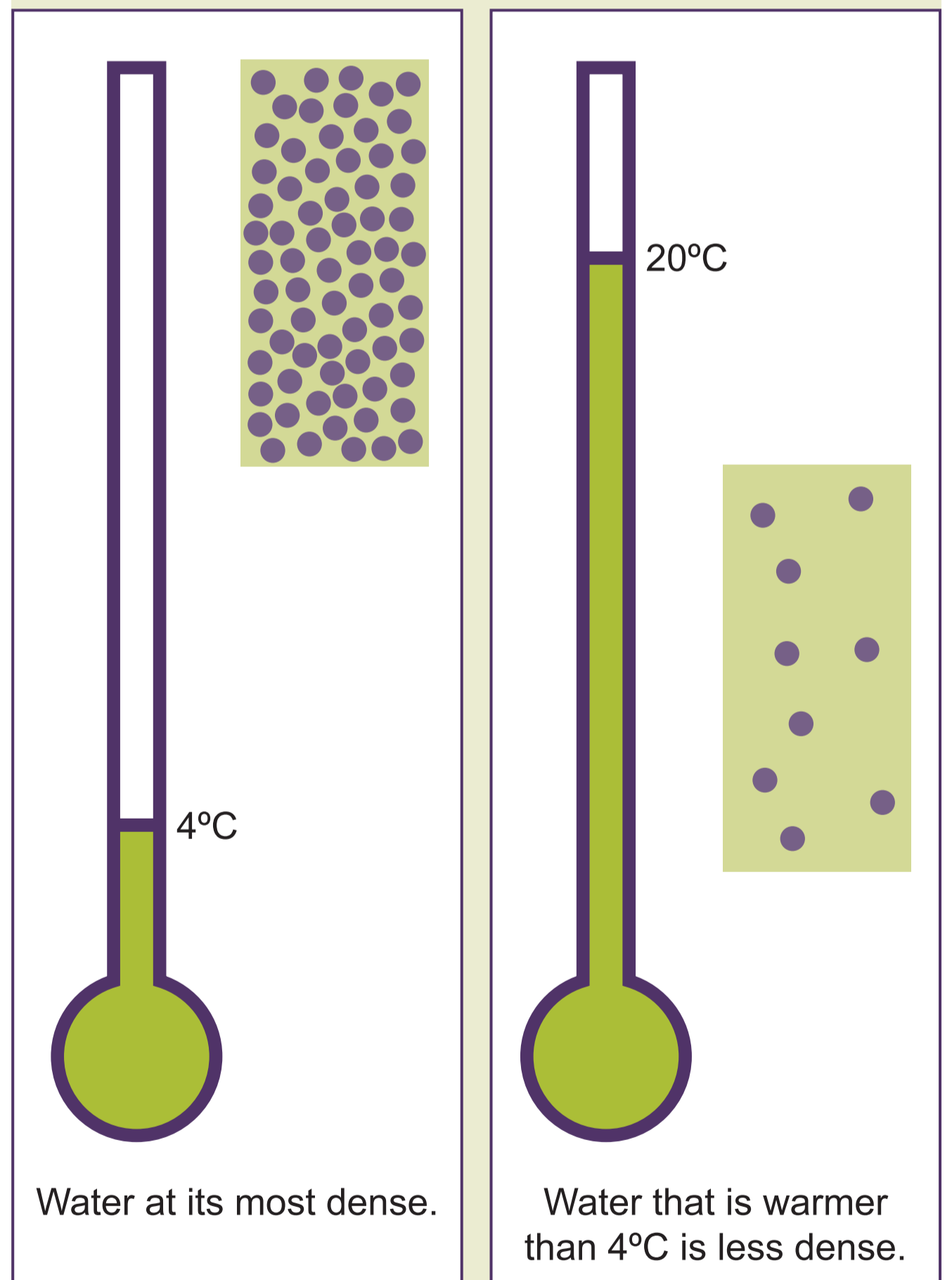


Medium density is like living in a town.



High density housing is living in a city or big apartment – lots of people in a small space.

Water density is affected by temperature.



This means the warmer, less dense water floats and that the colder, more dense water sinks.

That's why when you are swimming in a lake the water near your feet feels colder.