

Imagine you have a block of ice. When ice melts, it changes from a solid to a liquid, so its shape and how it looks are different. But why does its weight stay the same?

Here's the simple reason: When ice melts, it's still made of the same water, just in a different form. No water is added or taken away during melting. The tiny particles called molecules that make up ice don't disappear; they just move closer together and slide past each other instead of being stuck in a solid shape.

Think of it like this: You have 1 liter of ice cubes in a cup. When the ice melts, it turns into 1 liter of water. The number of molecules and how heavy they are doesn't change. So, even though the ice changes shape and becomes water, the weight stays the same because the amount of stuff (water molecules) is the same.

In science, we say that *mass is conserved*. This means mass (or weight, when we use scales in everyday life) does not change during melting because the water is not lost or gained—only its state changes from solid to liquid.