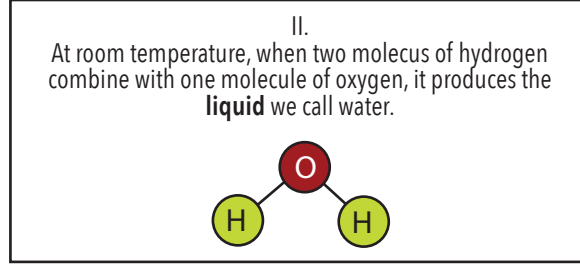
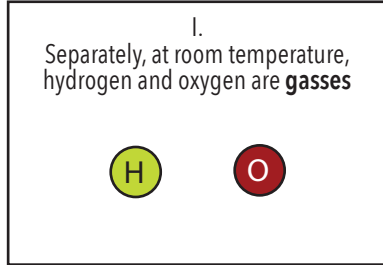


Emergence of Novel Properties in a Simple Physical System

From H's and O's to H₂O:

How we get a liquid from the combination of two gasses.



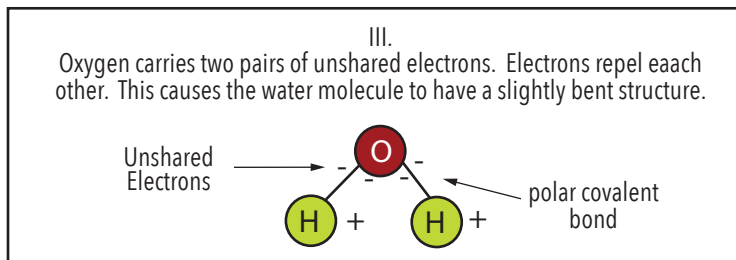
Question:

Here, we have what we might regard as a **qualitative** transformation -- from gas to liquid.

As a liquid, water has **different properties** than its base elements, which are gasses.

A liquid **emerges** from the combination of two gasses.

How is this possible?



The O atom keeps electrons away from the H atoms, causing the O atoms to have a slightly more negative charge.

