## Water Drops

Water is a chemical compound made up of 2 Hydrogen Atoms and 1 Oxygen atom, together they make a water molecule. In a single drop of water there are billions of water molecules. Water molecules are attracted to each other and want to stick to each other! They cling to each other even tighter at the surface, creating a thin layer called surface tension, it is a little bit like a very thin skin. As water droplets build on top of each other they form a small dome shape with the surface tension (or 'skin') keeping all the molecules inside.



## What to do:

- Print out the 'How Many Drops to Fill Each Circle' page.
- Place a strip of clear packing tape over the circles on the page to create a waterproof layer.
- Alternatively you can pop the whole page into a clear page protector.
- Once your page is 'waterproof' you can guess how many drops of water will fill each circle, write this in the 'Guess' column.
- You can guess all at the beginning or do them one at a time.
- Once you have guessed how many, use the pipette to carefully drop one drop at a time into the middle of the circle, the water will grow to fill the circle, count as you go!
- Write how many drops actually filled the circle in the 'How Many Drops?' column.

## Some questions to ask at the end:

Were your estimates (guesses) close to how many drops you needed? Were you surprised with the results? Which circle needed the most drops to fill it?

Which circle needed the least?

Could you see the surface tension holding the domes of water together?

Can you figure out how many drops of water you needed altogether for ALL the circles?

How many billion water molecules do you think that might be?



## How Many Water Drops Fill Each Circle?

Guess how many drops of water will fit in each circle then use a dropper to drop water on one drop at a time, count as you go...how close were your guesses?

