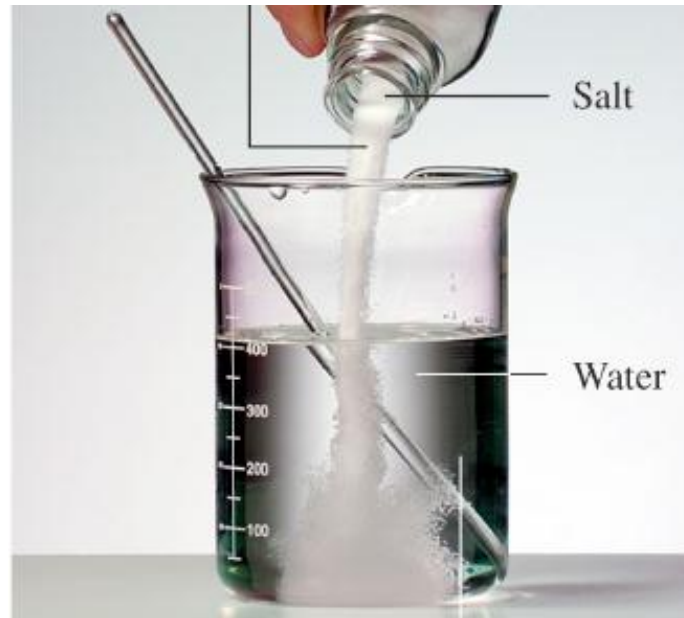


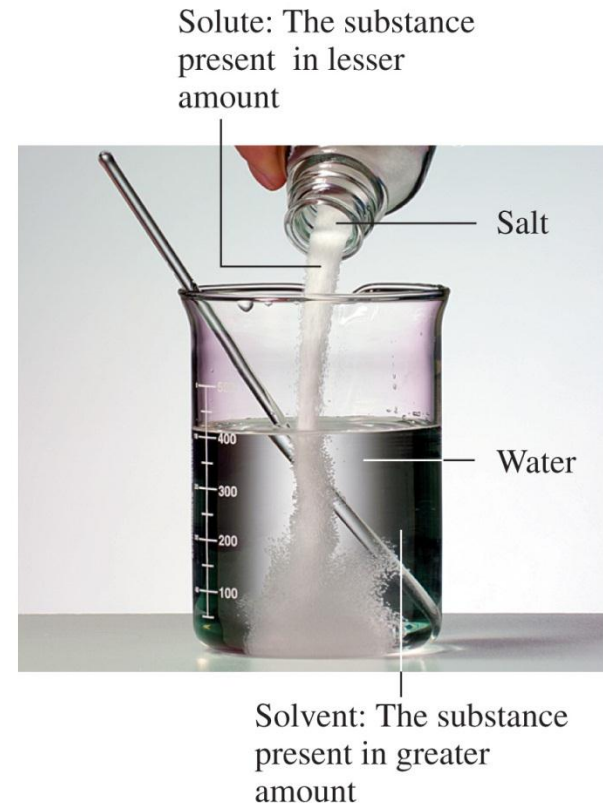
Purpose: How does water orient itself in a *solution*?

- Warmup: Take out the Trikke Sheet homework



1. What are solutions made of?

- They are homogeneous mixtures
- SOLVENT – is what you call the main ingredient
- SOLUTE – is what you call the minorities



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solution

solute

solvent

solute

solvent

solution	solute	solvent	solute	solvent

solution	solute	solvent	solute	solvent
tears				

solution	solute	solvent	solute	solvent
tears	<u>NaCl</u>	water	solid	liquid

solution	solute	solvent	solute	solvent
tears	<u>NaCl</u>	water	solid	liquid
soda				

solution	solute	solvent	solute	solvent
tears	<u>NaCl</u>	water	solid	liquid
soda	CO_{2(g)}	water	gas	liquid

solution	solute	solvent	solute	solvent
tears	<u>NaCl</u>	water	solid	liquid
soda	CO_{2(g)}	water	gas	liquid
air	oxygen	nitrogen	gas	gas

solution	solute	solvent	solute	solvent
tears	<u>NaCl</u>	water	solid	liquid
soda	CO_{2(g)}	water	gas	liquid
air	oxygen	nitrogen	gas	gas
dental filling				

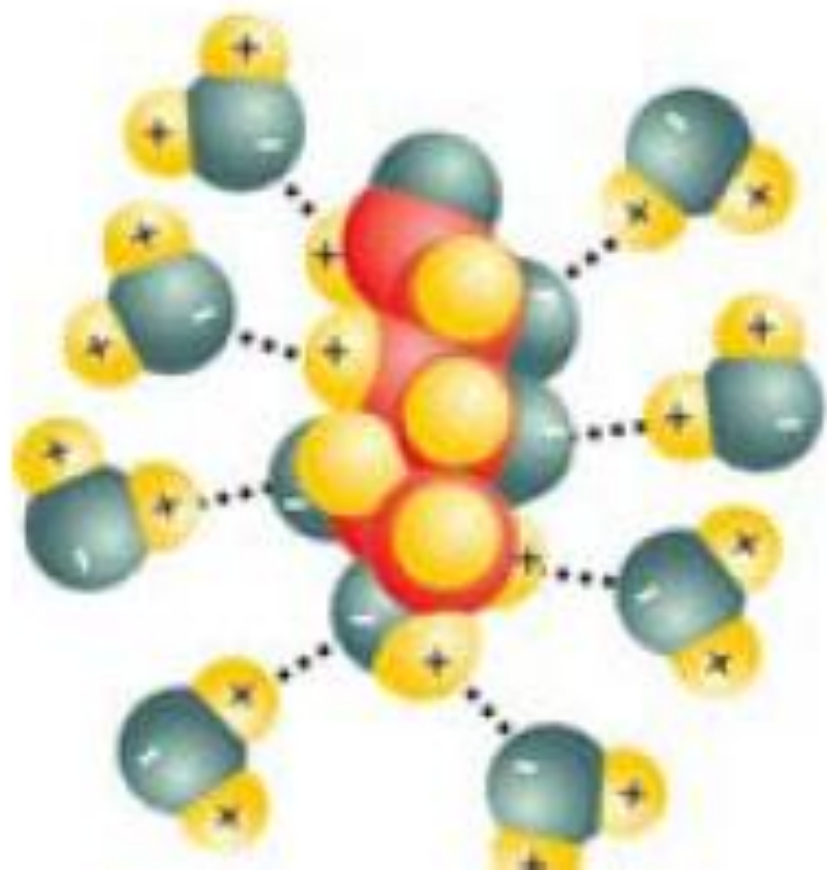
solution	solute	solvent	solute	solvent
tears	<u>NaCl</u>	water	solid	liquid
soda	CO_{2(g)}	water	gas	liquid
air	oxygen	nitrogen	gas	gas
dental filling	silver, copper	mercury	solid	liquid

solution	solute	solvent	solute	solvent
tears	<u>NaCl</u>	water	solid	liquid
soda	CO_{2(g)}	water	gas	liquid
air	oxygen	nitrogen	gas	gas
dental filling	silver, copper	mercury	solid	liquid
moisturizer				

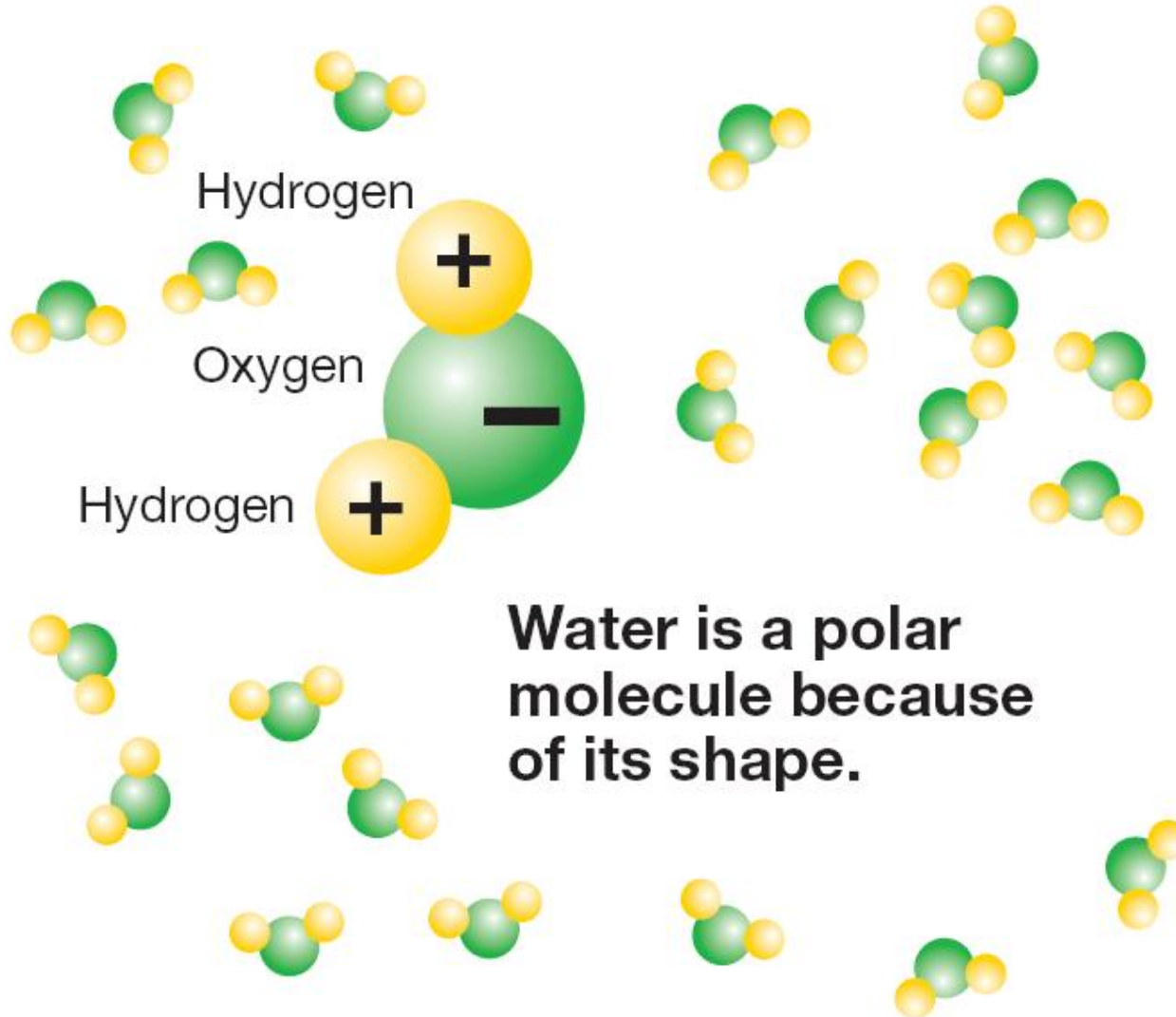
solution	solute	solvent	solute	solvent
tears	<u>NaCl</u>	water	solid	liquid
soda	CO_{2(g)}	water	gas	liquid
air	oxygen	nitrogen	gas	gas
dental filling	silver, copper	mercury	solid	liquid
moisturizer	glycerine	water	liquid	liquid

solution	solute	solvent	solute	solvent
tears	<u>NaCl</u>	water	solid	liquid
soda	CO_{2(g)}	water	gas	liquid
air	oxygen	nitrogen	gas	gas
dental filling	silver, copper	mercury	solid	liquid
moisturizer	glycerine	water	liquid	liquid
18 karat gold jewelry				

solution	solute	solvent	solute	solvent
tears	<u>NaCl</u>	water	solid	liquid
soda	CO_{2(g)}	water	gas	liquid
air	oxygen	nitrogen	gas	gas
dental filling	silver, copper	mercury	solid	liquid
moisturizer	glycerine	water	liquid	liquid
18 karat gold jewelry	copper	gold	solid	solid



#2: Water has a “+” end and a “-” end



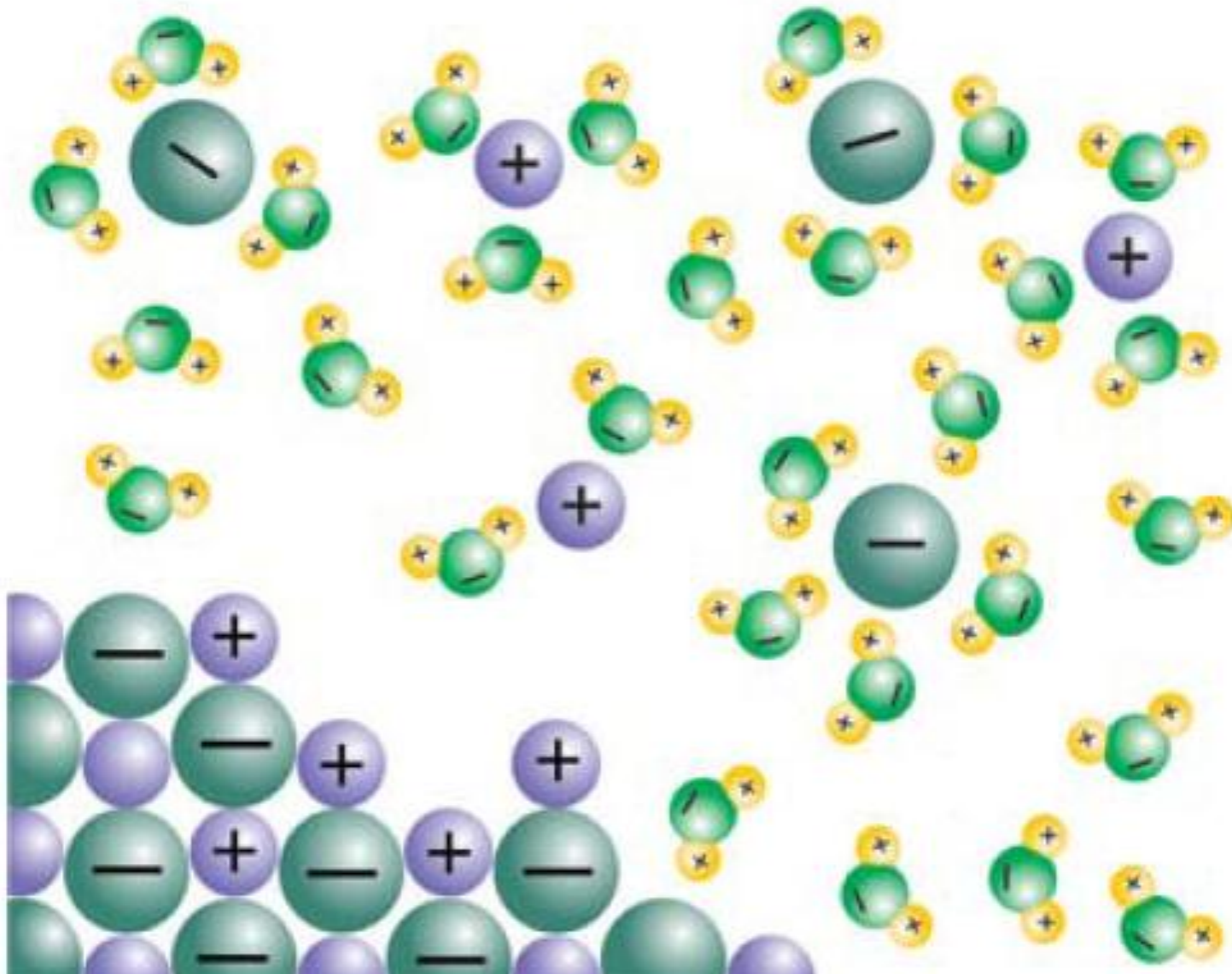




+ Sodium ion

- Chlorine ion

+ - Water molecule



Learning Check (Don't copy):

The substance that there is less of is called the

The substance that there is more of

Solution: Popsicles



The solute is _____

The solvent is _____

Learning Check

Identify the solute in each of the following solutions:

- A. 2 g sugar (1) and 100 mL water (2)
- B. 60.0 mL of ethyl alcohol (1) and 30.0 mL of methyl alcohol (2)
- C. 55.0 mL water (1) and 1.50 g NaCl (2)
- D. Air: 200 mL O₂ (1) and 800 mL N₂ (2)

Solution

Identify the solute in each of the following solutions:

A. sugar (1)

B. methyl alcohol (2)

C. NaCl (2)

D. O₂ (1)

TODAY BY THE BELL

- 1) Figure out the formula of your substance.
- 2) Figure out how to draw it.
- 3) Draw two containers labeled SOLID and AQUEOUS
- 4) Place molecules in them, very much like in #2 yesterday
- 5) *Add about twenty H₂O molecules, pointed in the correct direction like in today's notes.*

Solution Worksheet

What is the Solute and what is the solvent? Label Each.

1. Cigarette Smoke and Air
2. Caffeine and Water (Cup of Coffee) solute
3. Water and Oxygen (Water in a Fish Tank)
4. Carbon Dioxide and Sugar Water (Sealed Can of Pop)
5. Oxygen and Nitrogen (Air)
6. Minerals and Water (Hard Water)
7. Water and Sugar (Maple Syrup) solvent
8. Acetic Acid and Water (Vinegar)
9. Salt and Water (Ocean Water)
10. Make your own





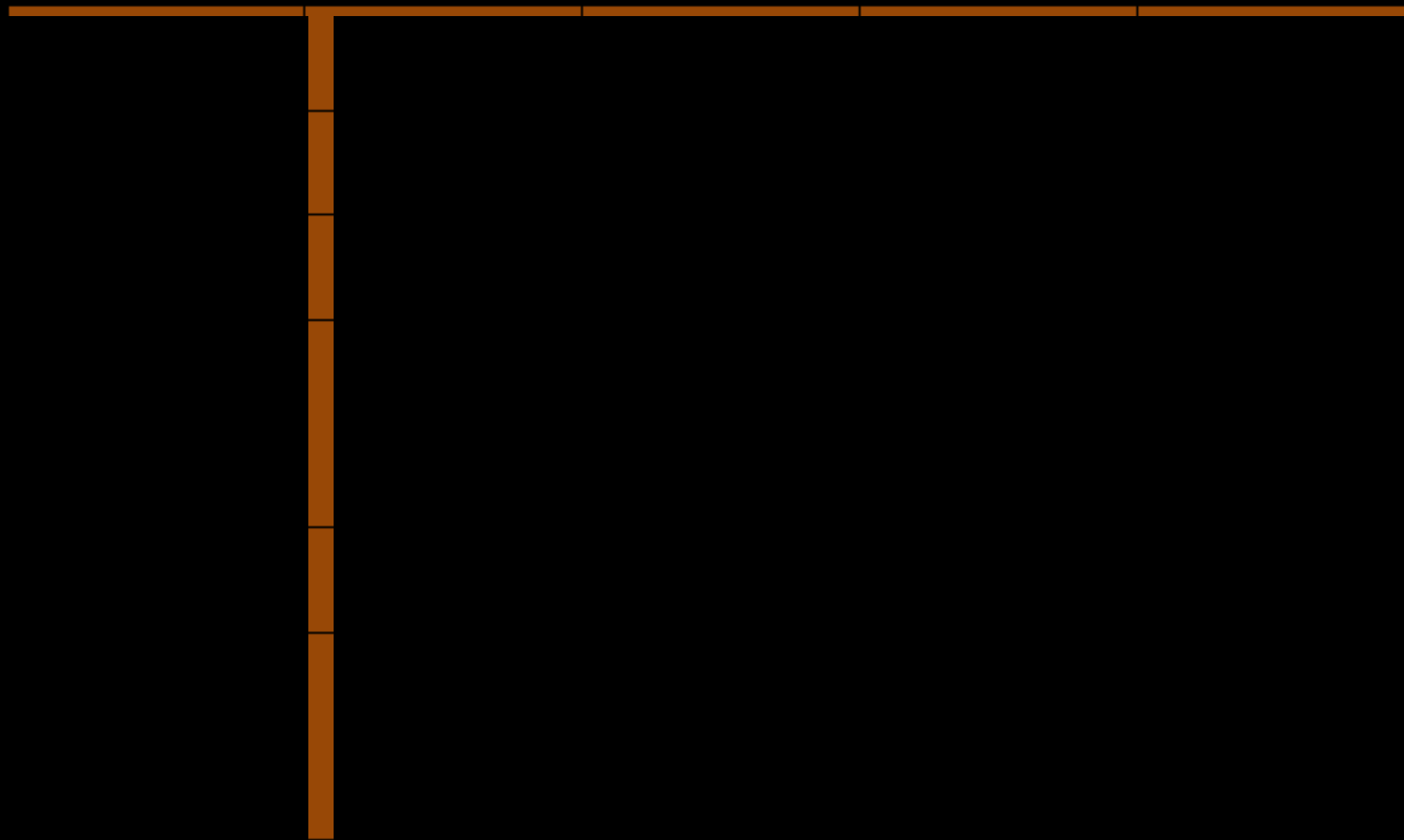
solution

solute

solvent

solute

solvent



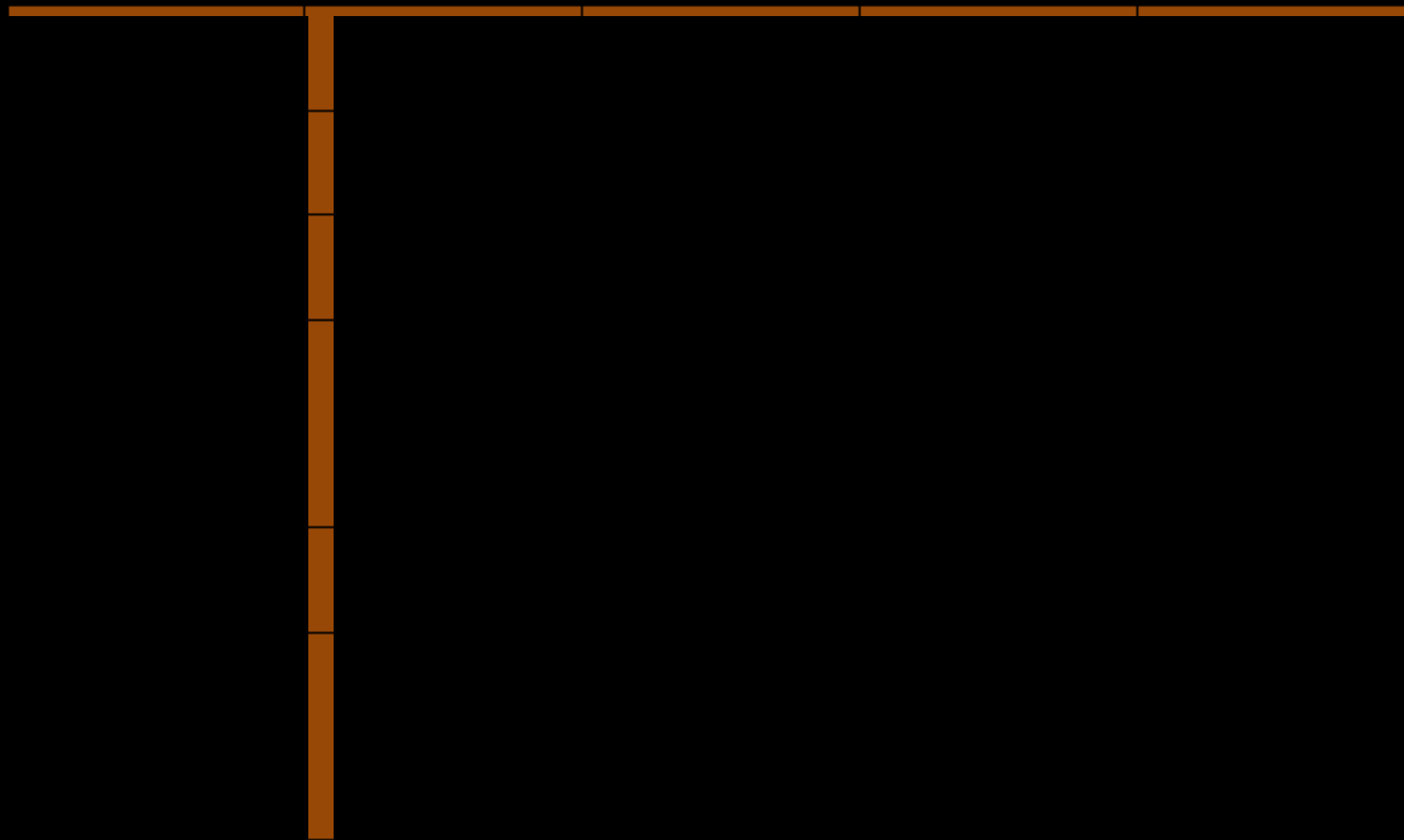
solution

solute

solvent

solute

solvent



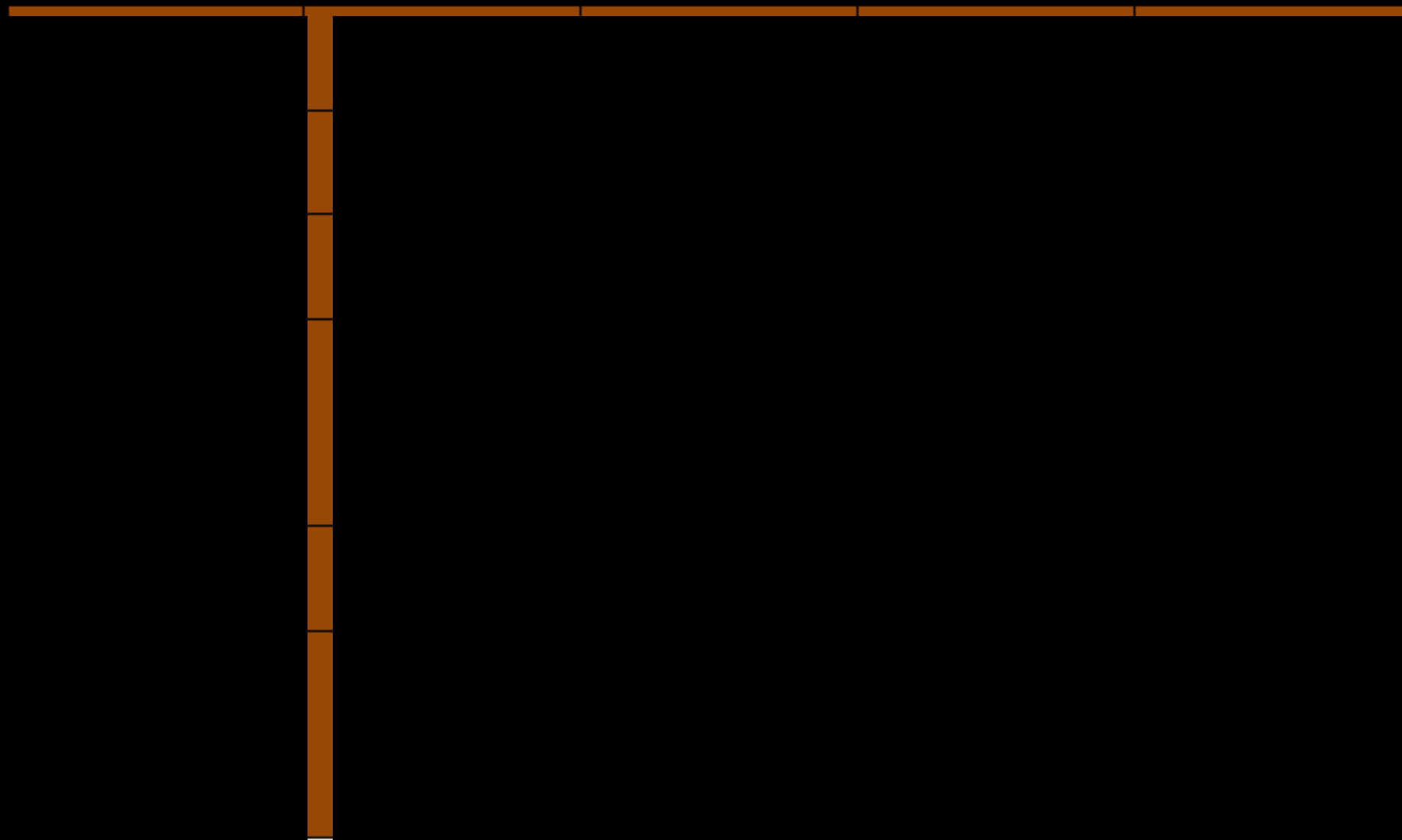
solution

solute

solvent

solute

solvent



solution

solute

solvent

solute

solvent

