

Solution Activity

Now that we have learned about solutions, we are going to test our knowledge with our own solutions!

For this activity, you will need the following materials:

- Cup to mix solutions (*clear cup works best*)
- Water
- Choice of other liquid to drink
- Choice of other powder mixture
- Measuring cups ($\frac{1}{2}$ tsp)
- Salt
- Sugar

Directions:

1. Fill your cup about $\frac{3}{4}$ full of water and take a sip
 - a. This is what your water tastes like before we create our solutions
 - b. You may keep an extra cup of water on the side to compare tastes (*optional*)
2. Mix in $\frac{1}{2}$ tsp of salt into your drink and take a sip
 - a. This is what a salt water solution tastes like with low solubility
 - i. **Low solubility** → low amounts of solute mixed in large amounts of solvent
3. Mix in another $\frac{1}{2}$ tsp of salt into your drink and take a sip
 - a. This is what a salt water solution tastes like with higher solubility
 - i. **High solubility** → high amounts of solute mixed in solvent
4. Empty your cup and repeat steps 1-3 with sugar
5. Empty your cup and repeat steps 1-3, but with your choice of solute (edible powder) and/or solvent (drinkable liquid)

REFLECTION:

1. What were all of your solutes and solvents that you used during this activity?

- Solute → _____

- Solvent → _____

2. Explain what the solutions tasted like with low solubility.

3. Explain what the solutions tasted like with higher solubility.

4. How can you use your knowledge of solubility and solutions throughout your life?

