



The Science of Pickling

BIG IDEAS:

Today you will INVESTIGATE how certain **solutions** and **mixtures** can act as preservation agents and practice CREATING these solutions and mixtures.

YOU WILL NEED:

- Vegetables, fruits, herbs and spices to pickle
- Vinegar
- Water
- Kosher Salt
- 8 oz. jar
- Culinary tools:
 - Knife
 - Cutting board
 - Spoon



Green Heart Quick Pickles

Choose your favorite vegetables and herbs to make this recipe unique!

Ingredients	Directions
Makes one 8 oz jar	<ul style="list-style-type: none">Place your choice of pickling spices and herbs at the bottom of a sanitized 16 oz jar.Chop vegetables into spears, rounds, or chunks. Fill jar with veggies.Stir together vinegar, water, and salt until salt dissolves to create brine.Pour brine over vegetables.Tap side of jar with a spoon to release air bubbles, seal jar with lid.Refrigerate for 48 hours-enjoy! <i>*Keep refrigerated & eat within 2 weeks.</i>
1/2 lb vegetables (carrots, cucumbers, green beans, onions, etc)	
1/4 cup water	
1/4 cup vinegar (apple cider or distilled vinegar)	
1/2 tsp pickling or kosher salt	
1 tsp pickling spices (fennel seed, garlic, mustard seed, peppercorns, etc)	
Additional fresh herbs!	

- *Optional Taste- Test:* a raw veggie, fruit or herb that you put into your pickling mix. You can *compare* the flavor of your taste-test with the flavor of your pickles when they are ready.

GROW MINDS, CULTIVATE COMMUNITY



WHAT TO DO:

1. **REVIEW:** The [Green Heart Rules of Respect](#).
2. **WATCH:** [The Science of Pickling](#) video.
3. **ANSWER:** the following **questions** in your journal, or discuss with someone:
 - 1) What *mixture* do we use to make pickles? What *solution* do we make?
 - 2) How does the pickling process prevent spoilage? What role does our pickling solution play?
4. **EXPERIMENT:** now that we have learned about the science behind pickling, you will create your own pickling mix. Before you start cooking, watch the [Cooking in the Kitchen Video](#) to review kitchen and knife safety.
5. **GATHER:** the ingredients that you will need to create your pickling mix.
6. **CREATE:** your pickling mix by following the recipe.
7. **IDENTIFY:** Identify the solutions and mixtures that you've made today once your Quick Pickles are in your jar. Write down a list or share them out loud.



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1/2 tsp pickling or kosher salt	Pour brine over vegetables.
1 tsp pickling spices (fennel seed, garlic, mustard seed, peppercorns, etc)	Tap side of jar with a spoon to release air bubbles, seal jar with lid.
Additional fresh herbs!	Refrigerate for 48 hours-enjoy! *Keep refrigerated & eat within 2 weeks.



8. **TASTE-TEST:** Try a raw fruit, vegetable or herb that you put into your pickling mix today. Rate your test *WATCH:* [How to Do a Green Heart Taste- Test](#).
9. **CLEAN-UP:** Respect your work space by putting your supplies back and cleaning up your space!

For Educator Notes and to “dig deeper,” see [here](#).