Easter Marshmallow PEEPS® science

EASTER SCIENCE WITH PEEPS

Name: _____ **Date:** _____

People love the sugar-crusted chicks and bunnies better known as Marshmallow Peeps®. How do we know? Well, what's the easiest way to make Peeps disappear? Just open up the package! They'll be gobbled up in no time. That said, if you *can* resist eating them right away, there's another method you can try, too. For a fun science experiment, try placing Peeps in different liquids. Then, observe which liquid dissolves them the fastest.

Like most sweet treats, Peeps will break apart when they're submerged in certain liquids. This is known as **dissolving**. Dissolving happens when a **solute** (such as a Peep) is placed in a **solvent** (such as vinegar). The solute eventually breaks up and is absorbed into the solvent. The result is known as a **solution**.

Not every liquid is a solvent and not every solvent will dissolve the same solute at the same speed. The speed at which a solvent is broken down can depend on many things. One key factor is the temperature of the solvent. A hot solvent will often dissolve substances more quickly than a cold solvent. Acidity is also a major factor. Solvents with higher acidity (like vinegar) will break down sugar and other substances faster than those with lower acidity (like milk).

It's no secret that Peeps have a lot of sugar. That's one of the many reasons they're such a hit! With Peeps and many other sweets, sugar is the glue that holds the treat together. Without the sugar, Peeps would be a sad pile of gelatin and colorings. Who wants that?

Examining the acidity of solutions will provide helpful clues about which ones will lead to a quicker mallow melt. That way you'll know which liquids to keep your precious Peeps far, far away from.

EASTER SCIENCE WITH PEEPS

Name: _____ **Date:** _____

1. What about science makes marshmallows like Peeps dissolve so quickly?

_____

_____

_____

2. What do you think might be two examples of solutes? What could be two examples of solvents?

_____

_____

_____

3. What factors affect the speed at which a solvent breaks down solute?

_____

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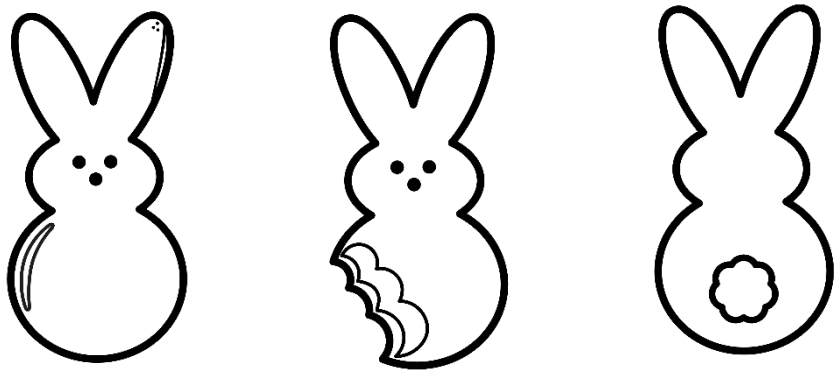


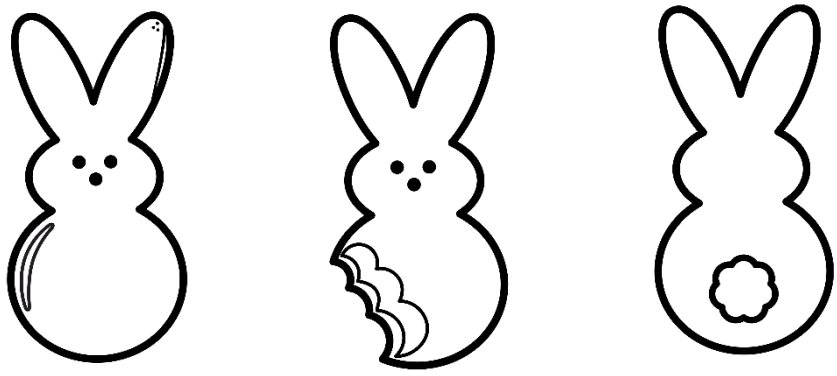
EASTER SCIENCE WITH PEEPS

ANSWER KEY

1. What about science makes marshmallows like Peeps dissolve so quickly?
   Marshmallow Peeps are mostly made of flour, sugar, and salt. All of these ingredients dissolve in liquid.

2. What do you think might be two examples of solutes? What could be two examples of solvents?
   Answers will vary but might include salt, sugar, flour, etc. Examples of solvents could be water, vinegar, soda pop, etc.

3. What factors affect the speed at which a solvent breaks down solute?
   The higher the temperature of the solvent and the more acidic the solvent is causes the solute to be dissolved faster than a solvent with a lower temperature or acidity.



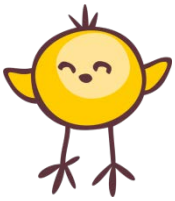
PEEPS PREDICTIONS

Name: _____ **Date:** _____

LIQUID	PREDICTION	ACTUAL RESULT
baking soda water		
clear soda pop		
plain water		
salt water		
ginger ale		
vinegar		

PLAIN WATER

BAKING SODA WATER



CLEAR SODA POP

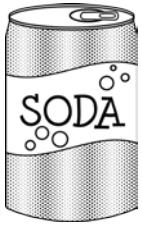
SALT WATER

GINGER ALE

VINEGAR

Easter Science :
Marshmallow Peeps®

WHAT YOU NEED

 PEEPS	 CLEAR CUPS	 WATER
 VINEGAR	 SALT	 GINGER ALE
 CLEAR SODA POP	 TIMER	 BAKING SODA

Easter Science :
Marshmallow Peeps®

Pour or mix your liquids into 6 cups

- Baking soda water
- Plain water
- Salt water
- Vinegar
- Ginger ale
- Clear soda pop

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Label each liquid with its printable table card.

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Make your predictions. What will happen to the Peeps in each liquid?

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Place one Peep into each liquid. Try to submerge your Peep and you'll see that they float!

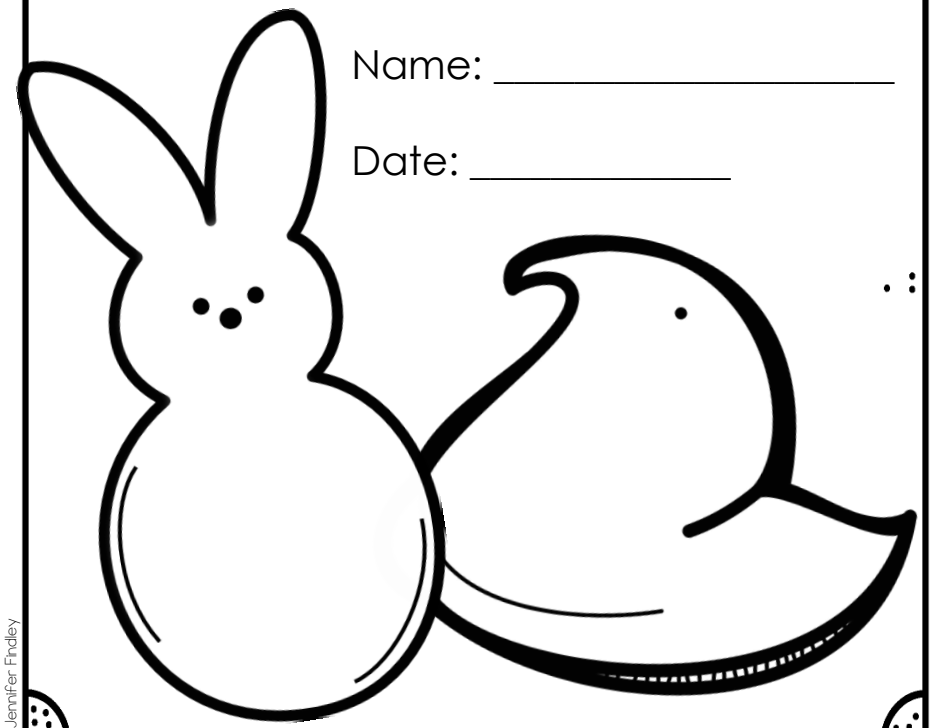
Easter Science : Marshmallow Peeps®

Set your timer for 15 minutes and check on the Peeps. Check again in another 15 minutes.

Dissolving Peeps

Name: _____

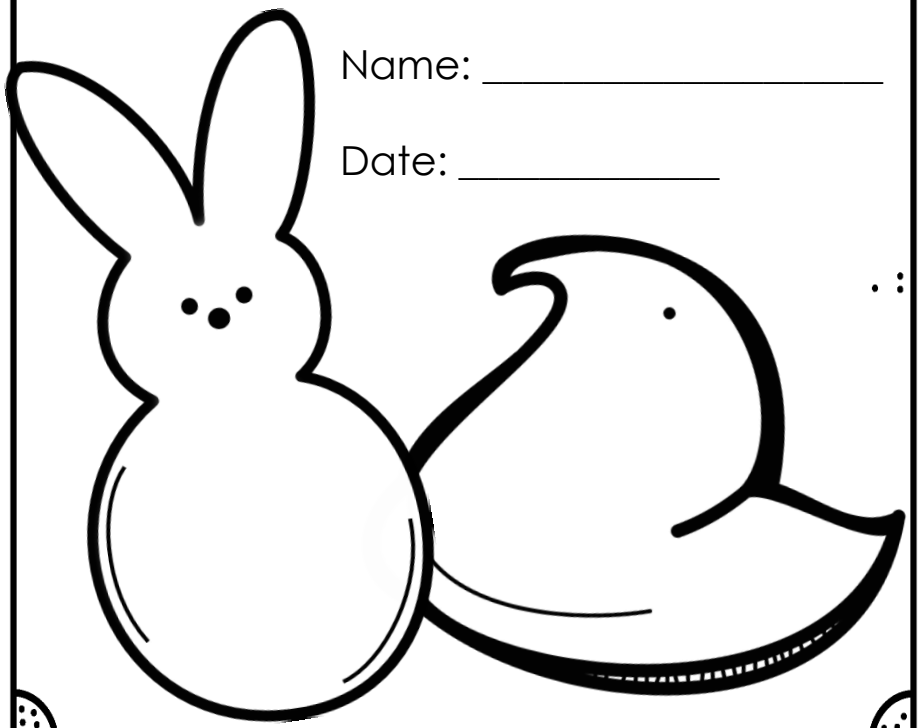
Date: _____



Dissolving Peeps

Name: _____

Date: _____



Question: Which liquid will dissolve the Peep the most?

Hypothesis:

Materials:

Question: Which liquid will dissolve the Peep the most?

Hypothesis:

Materials:

Procedures:

Procedures:

Gathering Data:

Date: _____

Illustration:

Written Analysis:

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Gathering Data:

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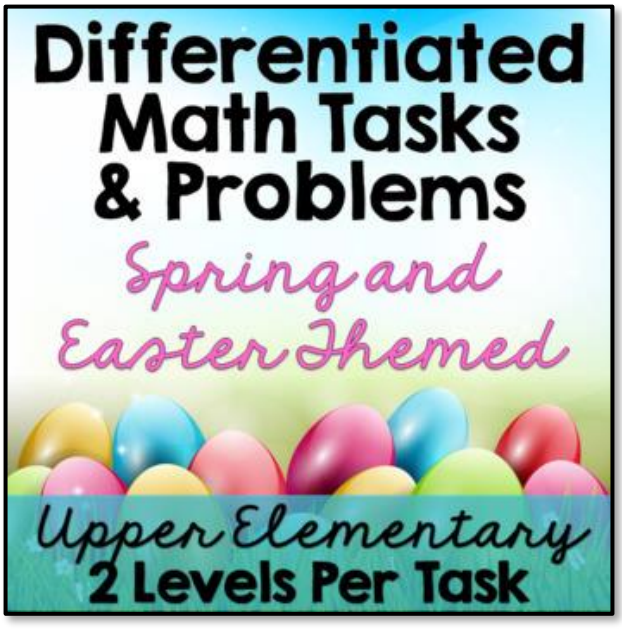
Conclusion:

Conclusion :

Reflection:

Reflection:

WANT MORE EASTER RESOURCES?



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