

Academy of Accelerated Learning, Inc.
Kindergarten STEAM Project

Swirl up a Tornado



Materials:

Two 2-liter clear plastic bottles (empty and clean), water, food coloring, glitter, duct tape.

Instructions:

1. Fill one of the bottles two-thirds full of water.
2. Add food coloring and a dash of glitter.
3. Use duct tape to fasten the two containers together. Make sure to tape tightly so that no water leaks out when you turn the bottles over.
4. Flip the bottles so that the bottle with the water is on top.
5. Swirl the bottle in a circular motion for 10-15 seconds. This will create a vortex and a tornado will form in the top bottle as the water rushes into the bottom bottle.
6. Take a picture of your project and send picture to google classroom.
7. Write about what you learned about tornadoes and send writing to google classroom.

THE SCIENCE BEHIND IT: Spinning the bottle in a circular motion creates a water vortex that looks like a mini tornado. The water is rapidly spinning around the center of the vortex due to centripetal force (an inward force directing an object or fluid such as water towards the center of its circular path). Vortexes found in nature include tornadoes, hurricanes and waterspouts (a tornado that forms over water).

Academy of Accelerated Learning, Inc.

Kindergarten STEAM Project

Sacudirse como Tornado



Materiales:

Dos botellas de litro transparentes y plasticas (vacías y limpias), agua, tinta comestible, escarcha, cinta gruesa (color plomo)

Instrucciones:

1. Llenar una botellas hasta dos tercios de agua
2. Agregar el colorante de comida asi como la escarcha
3. Usar la cinta para pegar las dos botellas juntas. Asegurarse que la cinta este bien ajustada para que el agua no se derrame cuando usted voltea las botellas
4. Darle vuelta a las botellas para que la botella con el agua llegue al tope
5. Hacer en forma de remolino la botella en movimientos circulares. Esto creara un vertice y el tornado se formara en el tope de la botella mientras el agua se precipita en el fondo de la botella
6. Tome una foto de su Proyecto y envielo a google classroom
7. Escriba que aprendio sobre tornados y enviar esa composicion a google classroom tambien

DETRÁS DE LA CIENCIA: Hacer girar la botella con un movimiento circular crea un vertice de agua que parece un mini tornado. El agua gira rápidamente alrededor del centro del vertice debido a la fuerza centrípeta (una fuerza interna que dirige un objeto o fluido como el agua hacia el centro de



**STAY HOME,
STAY SAFE**

**Academy of Accelerated Learning, INC.
Kindergarten Team Rubric**

Swirl up a Tornado project

Total points _____	4 Exceeds Standards	3 Meet Standards	2 Developing	1 Needs Assistance
Organized	Project appears finished and organized appropriately.	Project is mostly finished/organized appropriately.	Project is missing parts and is not organized.	Project was not organized.
Creativity	Interesting, creative, and engaging in visual presentation.	Some use of creativity and engaging.	Product is missing engaging, creativity and design.	Product is missing creativity and design.
Content <ul style="list-style-type: none"> • Reading • Writing • Math 	Appropriate content that reflects accuracy and explains. Reading/writing- Write 2 or more sentences about what you learned. Math- Use the appropriate measurements Follow all instructions to complete project.	Appropriate content that somewhat reflects accuracy and explains. Reading/Writing 2 sentences. Math- Did not use appropriate measurements Some instructions are missing.	Appropriate content is missing accuracy and explanations. Reading/Writing- Write 1 sentence. Math- Did not use appropriate measurements. Most instructions are missing.	Content lacks accuracy or not explained. Reading/Writing No sentences written. Math- Incomplete measurements and missing all the instructions.