The Incredible, Edible Aquifer

The Edwards Aquifer is an amazing underground “storage tank” of water that provides water to most of South-Central Texas. Although the aquifer is made of layers of special limestone rock, called Karst, you can use some common kitchen ingredients to create an “aquifer in a cup” to improve your understanding of groundwater and the structure of the aquifer...and then eat it!

Watch us create this project live at https://bit.ly/EAAAquiferInACup

Supplies + Instructions

• A 12-16 oz clear plastic cup
• Plastic drinking straws
• Spoon(s) for transfer
• Layers of “organic matter” listed below

Step 1: Fill your “plastic cup” aquifer with various levels to represent layers of the real aquifer:

a. Ice: KARST LIMESTONE
b. Clear Soda (dye blue with food coloring if you have it on hand):
   GROUNDWATER
c. Ice Cream: TOP SOIL
d. Cereal: UNSATURATED SOIL
e. Oreos: GROUND SOIL/DIRT
f. Sprinkles: ORGANIC MATTER
g. Gummy Bears: WILDLIFE
h. Kool-Aid: POLLUTION
i. Straw: WELL to get water from the aquifer

Step 2: As you layer...and then eat/drink your aquifer, think about how the various “organic matters” interact.

• How does the soda “water” flow around the ice “limestone?”
• How long did it take for your cup to feel “full”?
• What happens to the entire cup once the kool-aid meets the liquids?

We have choices about our behavior every day and it is our shared responsibility to protect the Edwards Aquifer and all environmental resources. What will you choose to do today? Tell us on social media. Learn more: EDWARDSAQUIFER.ORG/LEARNING-ZONE