

Newspaper in Education Presents

inquiziKidz

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What goes up
that must come
down?

kidzbiz

Part of the Future

Regan Hooper thinks technology is fun and interesting. She is in Bill Kebler's Technology Education class at Haile Middle School and part of the Technology Students Association (TSA). Regan and her friends in TSA work on projects that help others. Some of their recent projects have had environmental themes. They made a model of the beach with natural barriers in order to explore beach erosion. They also have worked on projects in relation to water conservation. One of their favorites was the dog washer, which was used to explore ways to save water. Regan was the secretary for TSA last year, and she competed in state technology competitions. She recently took second place at a TSA conference. She would like to continue learning about technology and plans to stay involved in TSA and technology classes. "Technology is everywhere, and I feel like I am part of the future," says Regan Hooper



Regan Hooper

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school biz

Technology Enthusiast

Bill Kebler, technology education instructor at Haile Middle School, has been teaching for 31 years and is still going strong. He introduces his students to the latest in technology by investigating information concerning weather stations, robotics, pneumatics, flight simulators, small engines, cam and cad labs. Students are responsible for constructing projects that range from mechanical arms to flight challenge gliders. Bill is the sponsor for the Technology Students Association at Haile. The group meets weekly in his classroom and prepares for competition against other middle school students from around the state. Haile Middle School won honors in technology for being one of the top three middle schools in Florida. This award is a reflection of the direction and enthusiasm for technology that Bill has shared with his students. "Technology is the future and my students will be prepared for it," states Bill Kebler.



Bill Kebler

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Hydrologic Cycle

Same as it always was

Water in Manatee County is so inviting that many citizens enjoy spending time playing and relaxing near it. If the water could talk and share some of its past experiences, we might hear stories about George Washington becoming our first President. Or maybe we would learn about the time when Christopher Columbus discovered the New World or maybe about the dinosaurs that roamed the Earth millions of years ago. Is it possible that the very same water we see and drink today could have been around long ago?

The amount of water that is on the Earth today is the same as it was billions of years ago. Water is repeatedly recycled through a process called the *hydrologic cycle* or *water cycle*. During the cycle, the water can be a solid, a liquid or gas. The cycle begins as the sun heats the water that is collected in places like the Manatee River or Wares Creek. This heating produces kinetic energy, which causes the water molecules to move more quickly. As the molecules move, the water changes from liquid to gas – a process called *evaporation*. Plants also assist with the water cycle. Leaves produce water when heated by the sun. This water is evaporated into the atmosphere in a process called *transpiration*.

Evaporated water rises into the air. The higher it goes the cooler it becomes. The cooled water molecules collect on small particles in the air to form droplets or ice. This part of the cycle is *condensation*. The droplets or ice come together to form cirrus, stratus and cumulonimbus clouds. In the United States on an average day, there are 40 trillion gallons of water in the clouds. Each day, about four trillion gallons of that water falls back to the Earth as *precipitation*, in the form of rain, hail, sleet, snow or fog.

When the precipitation reaches the ground, some of it is absorbed. Some will seep down into the underground reservoirs, known as aquifers. Other water will flow downhill and will find its way into streams, lakes, rivers and oceans. This phase is identified as *collection*.

Meanwhile, the sun begins heating the water again, getting it ready to start the evaporation cycle all over again. Just like the sun that rises every day, the water cycle keeps going and going and going.....



Discover the Future

Water is a resource that is always on the move. Check out these "moving" careers working with water.

- Water quality engineer
- Water management operations
- Research chemist
- Water regulation agent
- Water conservation specialist
- Conservation activist
- Hydrologist
- Lobbyist
- Fundraiser for conservation group
- Water theme park engineer
- Desalinization research scientist
- Water conservation advertising

For more career information see your school counselor and get information on-line at: <http://jobstar.org/tools/career/spec-car.cfm> OR <http://www.acinet.org/acinet/default.asp>



explore it

Build Your Own Water Cycle

You will need:

1. jar
2. plants
3. bottle cap or shell of water
4. soil
5. sand
6. small rocks



7. Fill jar as in the picture and put the lid on. (Fill the jar first with small rocks, then sand, then soil. Then add plants in the soil and place your bottle cap or shell of water in the jar.) Put the jar in a sunny place and see how the water cycle works.

Source: Environmental Protection Agency, www.epa.gov

InquiziKidz page is published every Wednesday in the Bradenton Herald-East Manatee Herald. Provided by Newspaper in Education, John Waltz, Manager (941) 748-0411 ext. 5031 Darren Falterman, Digital Media Specialist © Knight-Ridder Productions, inc.



- Ballard Elementary Magnet
- Daughtrey Preparatory Magnet
- Harlee Middle Magnet
- Johnson Middle Magnet
- Lee Middle Magnet



- Haile Middle School
- Lincoln Middle Magnet
- Manatee Elementary Magnet
- Rowlett Elementary Magnet
- Tillman Elementary Magnet
- Wakeland Elementary Magnet

Kidzone
www.kidzone.ws/water/

USGA's Water Science for Kids
<http://www.wga.usgs.gov/edu/>

Environmental Protection Agency
<http://www.epa.gov/kids/>

Southwest Florida Water Management District
<http://www.swfwmd.state.fl.us/waterkids/>

The Academy of Natural Science
<http://www.acnatsci.org/education/skytosea/bigdeal2.html>

Schools listed in red offer instruction in the subject area featured in today's InquiziKIDz

Next Weeks Inquizikidz - How do you guard against greed when going for the gold?

