



Lesson: How Much Water Are You Eating?

Common core:

Next Generation Science Standards

NGSS.K.2.ETS1.1

Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.

Time: 30 - 45 min

Objectives:

To understand the amount of water that goes into producing food, and to highlight different foods one could consume to reduce the amount of water used.

Key words:

- Conservation
- Water resource

(Using Key words: Students can create a glossary, in books or on wall in classroom. Students are encouraged to practice using vocab in written or verbal sentences - perhaps writing example sentences and displaying them. Students could earn points for using the vocab in novel sentences each week).

Resources:

- Common Food Items (printed and cut out)
- PowerPoint – Water Conservation

Activities:

The basis of this activity is to simply expose students to the reality of how much water goes into the food products they consume.



Have students split into six groups and pass out the images of common food items. For each picture, ask the student groups if they can estimate the amount of water it takes to produce the food product. Have student groups write their estimates on the board.

Class Discussion

(Show PowerPoint)

Q: What is water?

Q: Why do we need water?

Q: What are some things we do with water?

Q: Where does water come from?

Q: Where do we find water?

Q: How much water does one human need to survive? (bare minimum)

Q: How much water do you think you use?

Q: What would happen if we ran out of water?

Q: What foods required the least amount of water to produce? The most?

Q: How can we change our diets to conserve water?

The “Gallons of water per ounce of food” chart in the Water Conservation powerpoint shows the approximate answer to the first activity. Have students write the correct amount from the chart next to the amount they guessed on the board. Ask students if they think about the amount of water that goes into producing something? Have students write a two sentence summary of what they learned about water and below the summary, draw a picture of their favorite food. Have students guess how much water their favorite food takes to produce.

Further Activity or Homework and Discussion

Have students create a recipe that minimizes their water consumption using what they have learned in class. Have students total the amount of water necessary for their recipe by separating the ingredients, finding the water consumed for that product, and adding up the total water usage. An example of this could be pasta with red sauce; grains, eggs, tomatoes, garlic, onions, etc. = ____ Gallons of water.

Discuss what foods they could have for breakfast/ lunch/ dinner that would help conserve water for future generations.

If internet access is available, have students complete the Water Footprint Calculator at www.watercalculator.org. Have them take notes on five ways they could decrease their water footprint and bring them into class to share.

