

## *A Fun Activity to try before your Water Wonders Field Trip*

### Water Wonders Game Show

Divide the class into smaller groups. Give each person in the group a number. You will ask a question about water, each group will discuss the answer and the #1's will stand up when the group has reached a consensus on the answer. Once the person is standing all discussion in the group must stop. Have the groups answer the question in the order they stood up. If group A had a person standing first they would get to answer first, etc. Encourage the kids to stand even if another group has someone standing because they may get the question wrong and their group will have a chance to answer. Each round have a different numbered student be the one to stand up for the group and answer the question. This will encourage involvement by all students. Explain to them that they will have to make educated guesses on a lot of the answers, give the "points" to whatever group is the closest. (You may want to go over percentages and have a gallon jug on hand to show the students.) The goal of the activity is to get them thinking about the important role water plays in sustaining their lives from helping to power their homes, build their cars to the percent that makes up our bodies. Feel free to modify the game while keeping the goal in mind.

### Water Wonders Game Show Questions

#### General

- 1. What percentage of water do our bodies consist of?** Water can constitute as much as 70% of our body weight. (Typically: 76% in babies, 55% in females and 60% in males)
- 2. What percentage of our brain is water?** 75% of our brain is water
- 3. How many days could you survive without water?** 5-7 depending on the conditions.
- 4. How many gallons of water must a cow drink to make one gallon of milk?** 4 gallons
- 5. The rainiest place in the world is in the United States, can you guess what state it is in?**  
The world's rainiest place is Mt. Wai'ale'ale, Kauai, Hawaii. During an average year, there are only 15 dry days.
- 6. How many measuring cups of water should a person consume in one day from eating food and drinking water and other beverages to stay healthy?** 10 measuring cups of water per day
- 7. How many gallons of water is used to manufacture a new car including tires?** 39,090 gallons per car
- 8. What are the three forms that water occurs in?** Liquid, solid (frozen) and gas
- 9. Explain the water cycle:** Water moves through a cycle of different forms, in the gas state it is in the air, rain falls down on the Earth and goes into bodies of water or into the ground, it evaporates back into the sky or gets turned into ice.
- 10. Guess how many gallons of water it takes to sustain a human – taking into account all uses for water like drinking, showering, food production etc.** about 12 gallons per day
- 11. Guess how many gallons of water does the average American uses per day.** about 158 gallons per day [source: U.S. News and World Report].
- 12. Of all of the water on the planet what percentage is fresh water/ i.e. not salt water? It might help to show them a world map.** Only 3% of the water on the planet is fresh water 97% is salt water. We typically do not use salt water for human use and must rely on the freshwater available. Unfortunately 80% of the freshwater is frozen at the poles and in glaciers and some of it is too far underground, polluted or trapped in soil so of all the water we have on the planet only a very small percent (.003 to be exact) of the freshwater is usable. Now granted this small percent is equivalent to hundreds of billions of gallons of water but . . . we have about 6 billion people on the planet as well as other animals and plants that rely on this water and we have a net gain of 147 people a minute! We need to be more concerned with water conservation than ever before!

*(Over)*

## Wisconsin

- 1. How many lakes does Wisconsin have?** More than 15,000 lakes! The Eagle River chain of lakes in Northern Wisconsin is the largest chain of lakes in the world!
- 2. How many thousands of miles of river does Wisconsin have?** 13,500 miles of navigable streams and rivers. ( 17.6 football fields in a mile)
- 3. Name the five Great Lakes:** Huron, Ontario, Michigan, Erie, Superior
- 4. Wisconsin's lakes are threatened by non-indigenous species, animals that have come from other bodies of water and countries that have been introduced into the great lakes. Guess how many non-indigenous aquatic plants and animals are in the great lakes?** At least 160, over half of them since the opening of the St. Lawrence Seaway in 1959.
- 5. How many gallons of water do you think Wisconsin's 50 fossil fuel power plants use? Make sure they know power plants are where we get our electricity.** Nearly 4 billion gallons of water per day. (The state's two nuclear power plants use about 2 billion gallons daily.)

## Groundwater

- 1. In Wisconsin we truly "walk on water" can you guess how many gallons of groundwater (water stored under the ground within the soil and rock structures) is in Wisconsin?** 1.2 million billion gallons, if it were above ground, it would submerge the state in 100 feet of water.
- 2. Guess how many gallons of groundwater we use in Wisconsin in one day.**  
A. 59 million  
B. 220 million  
**C. 760 million**
- 3. What percent of people living in Central Wisconsin away from the Great Lakes rely on groundwater for their water supply?** 97 percent, seven out of 10 Wisconsinites
- 4. Where does groundwater come from?** The sky! Rainfall over Wisconsin averages 32 inches annually; only 6-10 inches of it soaks in to become groundwater.

## Conservation

- 1. How many gallons of water does the average person use in their homes a day?** 100 gallons (in home use)
- 2. Which activity do you think consumes the most?** Typically, households consume at least 50% of their water by lawn watering.
- 3. Which indoor activity do you think uses the most water?** Toilets! An average of 27 gallons per person per day. Old models of toilets which are still in the majority of peoples homes use 5 gallons per flush. Newer models use only 1.6 gallons.
- 4. How many gallons of water do you think a 5 minute shower takes?** 15-25 depending on the shower head. Now have them think about how long they usually shower!
- 5. How many 8 oz. glasses of water does it take to make a six-pack of soda?** 15,000, you could drink 15,000 glasses of water for every 6 pack of soda!

*\*\*\*These statistics were taken from a variety of sources, we did our best to find the most commonly used facts from reputable sources.*