

*Wet'n Wild*  
**SCIENCE  
CHALLENGE**





## WELCOME TO WET 'N WILD!

Wet 'n Wild is a great place to have fun by yourself or with a group of your friends and classmates. As you look around, you can see that we have all kinds of exciting, challenging and thrilling water based rides and attractions.

Wet 'n Wild has been built and operates with state of the art engineering, scientific, and environmental principles. Fields and technical areas listed below are representative of those that play a part in our design and day to day operations.

- Water Chemistry
- Engineering
- Physics
- Health Sciences
- Mathematics
- Hydrology

Challenge questions will help your students understand what some of our attractions involve and the technical and scientific considerations they represent.

Follow the instructions and try to answer the questions, which will help you have an experience here at Wet 'n Wild that is not only thrilling, but educational as well!

Enter your name, school and teacher's name in the space provided below and return the sheet to your teacher or chaperone when you have completed it. If you have any questions, just ask one of the attraction attendants!

Above all, have fun today!

STUDENT NAME \_\_\_\_\_

SCHOOL \_\_\_\_\_

TEACHER'S NAME \_\_\_\_\_



1. AMOUNTS OF WATER IN VARIOUS ATTRACTIONS

- a. BUBBA TUB contains: 17,600 gallons of water
- b. MACH 5 contains: 130,000 gallons of water
- c. SURF LAGOON contains: 570,000 gallons of water



How many gallons of water are in all of these rides \_\_\_\_\_ gallons

2. Each time you flush your toilet at home, it requires 1.4 gallons of water.

How many times could you flush the toilet with all the water in Bubba Tub?

(Hint: round to the nearest whole number)

\_\_\_\_\_ flushes

3. Calculate the weight of the water in the Surf Lagoon (in pounds). (Hint: each gallon of water takes up 0.134 cubic feet of space, each cubic foot of water weighs 62 lbs.)

\_\_\_\_\_ lbs.

4. It takes 2 oz. of Calcium Hypochlorite (dry granular chlorine) to achieve 1 part per million (ppm) of Chlorine in 10,000 gallons of water. If you start at 0ppm, how much Calcium Hypochlorite would it take to reach 3ppm in the Mach 5 pool? Convert your answer to pounds and ounces.

\_\_\_\_\_ lbs. \_\_\_\_\_ oz.

5. Calculate the average speed (in miles per hour) of a rider on the Bomb Bay slide by counting the seconds (1 Mississippi, 2 Mississippi, etc.) it takes for someone to travel between two points. (Hint: The distance between the bottom of the capsule and the first red line is 168 feet; 1 mile = 5280 feet) For best viewing, go to the top of the Sun Deck. \_\_\_\_\_ mph

Do some people travel down the Bomb Bay faster than others? Why or why not?

\_\_\_\_\_

6. When Wet 'n Wild built the Lazy River in 1986, it was the first of its kind. The original design called for six pumps, consuming a total of 538,650 kilowatt hours of electricity per year. In one of Wet 'n Wild's many initiatives to reduce our impact on the environment, the Lazy River now operates on only two pumps. How many kilowatt hours of electricity are being conserved per year? \_\_\_\_\_ KW hours conserved per year

7. Wet 'n Wild pools have been built with a slight sloping deck for any "splash out" and rain water to drain away from each pool. Why is this?

- a) To reduce standing puddles that could cause bacteria and algae.
- b) To reduce slip hazards.
- c) To keep the deck dry when not in use.
- d) All of the above.

8. In contrast, some rides have such an abundance of "splash out" water during normal use that it's important to reduce the amount of waste.

As a result, these pool decks have been designed to capture this water back into the drainage system for re-use. Name a ride that is an example of each type of drainage system?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_





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# *Wet'n Wild*<sup>®</sup>

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