



## 2010-2011 Wonder Challenge

Name \_\_\_\_\_ School \_\_\_\_\_ Teacher \_\_\_\_\_

Find the exhibit, read the questions carefully, and fill in your answers. Work with friends & staff.

### FIRST FLOOR

#### 1) Grapevine Climber

How many people are on the climber? \_\_\_\_\_

If each person weighs 50 pounds, how much weight is the climber holding? \_\_\_\_\_

From atop this two-story climbing maze, can you find any of the following items? Please circle.



#### 2) Water Works

A vortex is a spinning flow of fluid. One example of a vortex is at the Water Works exhibit.

Can you find another example of a vortex in the museum?

\_\_\_\_\_

(Hint: Remember, both air and water are fluids.)



#### 3) Bubble-Airium



Look carefully at the Honeycomb Bubbles.

Below, draw the shapes of 5 bubbles with shared sides:

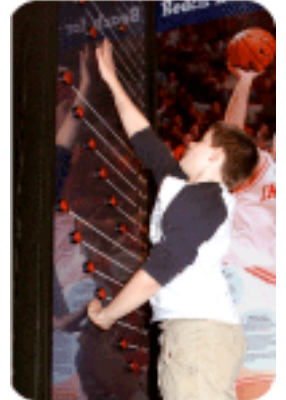
What else can you think of that has a similar shape? \_\_\_\_\_

## SECOND FLOOR

### 4) Calculate your Vertical Leap!

Your Vertical Leap is a measure of how far off the ground you can elevate your own bodyweight.

- Stand with your feet flat on the floor and without jumping, extend your arm to the highest button possible. This is your Standing Reach. Record it here. \_\_\_\_\_
- Now jump up and touch the highest button you can reach. This is your Jump Height. Record it here. \_\_\_\_\_
- Your Jump Height minus your Standing Reach is your Vertical Leap. (JUMP - REACH = VERTICAL LEAP) Record it here. \_\_\_\_\_
- Set a goal for next time. \_\_\_\_\_



### 5) Heat Camera

Step in front of the heat camera and look at your image!

What's warm? \_\_\_\_\_

What's cold? \_\_\_\_\_

What type of light energy is captured on the camera? \_\_\_\_\_

What animals can sense this type of light energy? \_\_\_\_\_



### 6) Aquarium

Use WonderLab's identification cards to locate the Clownfish and Hippocampus Tang. Observe them both, and describe how their behavior is different. \_\_\_\_\_

### 7) Beehive

How many bees are in the hive?

A) Count the number of bees in a one-inch square of the hive. \_\_\_\_\_

B) How many inches across is the hive (approximately)? \_\_\_\_\_

C) How many inches high is the hive (approximately)? \_\_\_\_\_

D) Multiply (B) x (C) to get hive area in square inches \_\_\_\_\_

E) Multiply the area (D) by the number of bees per square inch (A) to find out how many bees are on this side of the hive! \_\_\_\_\_



Thank you for visiting WonderLab!