



## 2009-2010 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 leaves are on the climber? \_\_\_\_\_

If there were two people on each leaf, how many people would be on the climber? \_\_\_\_\_

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



Why do you think bubbles are round?

\_\_\_\_\_  
What might determine the size of a bubble?

\_\_\_\_\_  
Find the viscosity tubes. In which tube do the bubbles of air rise most slowly?

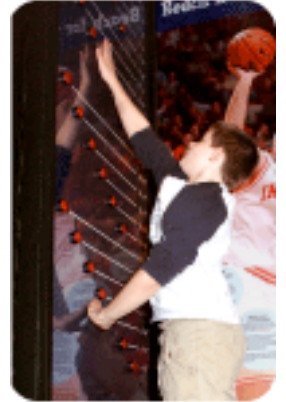
\_\_\_\_\_  
Why? \_\_\_\_\_

## SECOND FLOOR

### 4) Find your Vertical Leap Distance!

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

- A) Stand with your feet flat on the floor and without jumping, extend your arm to the highest button possible. This is your Standing Reach.
- B) Then jump up and touch the highest button you can reach.
- C) Your jump height minus your standing reach is your vertical leap distance. (JUMP - REACH = VERTICAL LEAP)
- D) What is your vertical leap distance? \_\_\_\_\_ 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

What do the bees bring into the hive from outside?

\_\_\_\_\_

Count the number of sides that one cell has in the beehive.

\_\_\_\_\_

Find a bee doing a waggle dance, except in the winter. What is this bee trying to communicate?

\_\_\_\_\_



Thank you for visiting WonderLab!