Math Boosters

Activity sheet for grades 6–8

Make your visit to the *Boost* exhibition count!
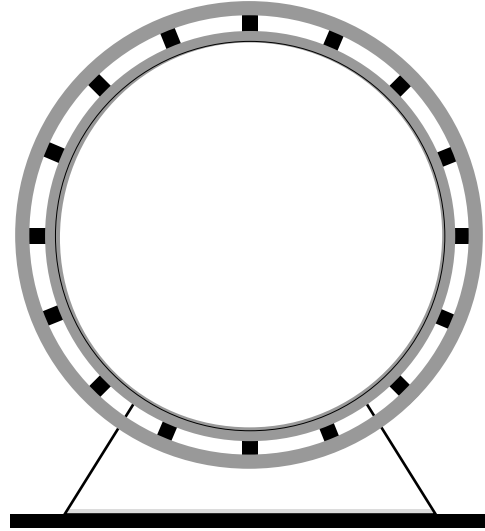Here are sum ways you can add math to your Science Museum of Virginia experience.

Human Hamster Wheel

Time to run! Hamsters can travel as fast as 1.86 miles per hour and can run more than 5 miles in one night.

How many degrees does the wheel spin if you walk one full turn of the wheel? _____

How many degrees does the wheel spin if you walk halfway around? _____

Bench Press

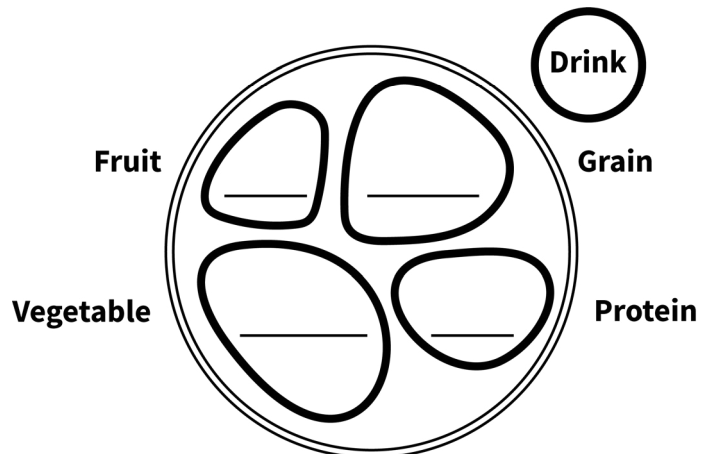Push, push, push! Record your score and four more from your classmates.

	Score
You:	
Classmate 1	
Classmate 2	
Classmate 3	
Classmate 4	

What is the median? _____

What is the range? _____

Endless Buffet

Let's eat! As you play, your score for each food group will show on the screen. Record that data five seconds before the timer runs out. Hint: it's easier when you work with others.
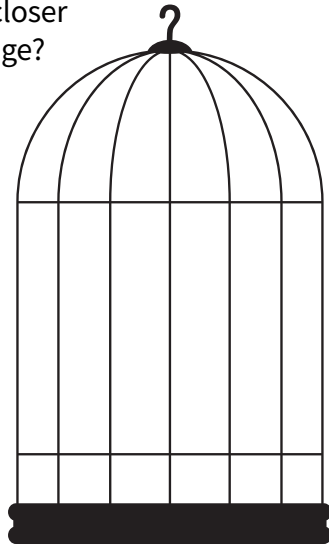
Fruit   Drink   Grain   Vegetable   Protein

If each protein costs $2, each grain is $0.75 and all other items cost $0.50, what is the total cost of your meal?

Giant Lever

Pull the ropes! Explore mechanical advantage by using a human-size simple machine.

Is it easier to pull the rope closer or further away from the cage?

_____

Reaction Time

Tap as many green buttons as you can. If each button has an equal chance of lighting up, what is the probability the top right button will turn green?

_____

Perfect Search

There are numbers everywhere in *Boost*!

Find two examples of numbers that are perfect squares:
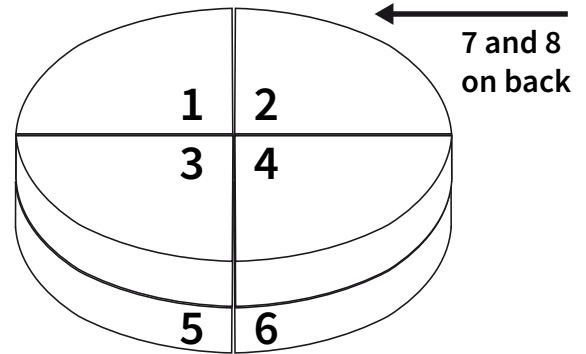
Where did you find them?_____

_____

Kitchen Stadium

You can divide a cake into eight equal pieces with just three cuts—one cut in each direction!

7 and 8 on back

1 2
3 4
5 6

More Cowbell

One of the tiniest musical notes is the thousand twenty-fourth note, which is 1/1024 of a whole note!

Happiness

Being happy is contagious! Being close to a happy person can increase your chances of feeling happy by up to 25%.

Self Control

Show off your best moves on the dance floor!

Hit That Note

Try the highest note. Estimate how long you held the note as a percentage of the total time you sang.

High Note Time _____

Total Time _____

High Note Percentage _____