

### What is volume?

Volume is the number of cubic units that are needed to fill a solid.

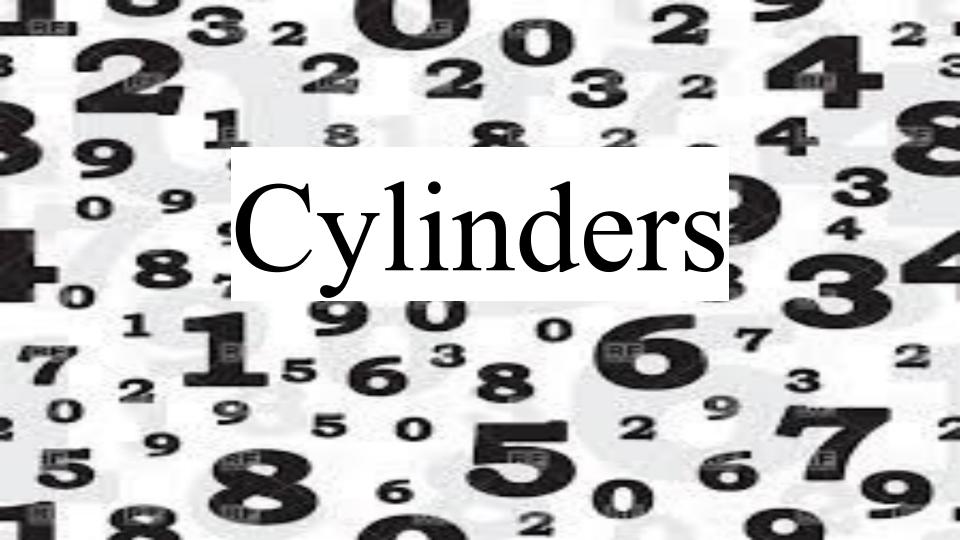
### Examples of volume in the real world

~ fueling your car for travel

~ cooking/baking

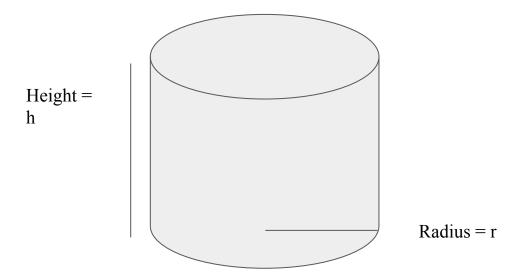
~ filling up pools and hot tubs





### Volume of Cylinders

The formula for the volume of a cylinder is  $V = \pi r^2 h$ . (radius to the second power)



## Real-World examples of volume of a cylinder

- ~ Soda Cans
- ~ Jenga container



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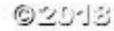
#### Volume of a Cone

The volume of a cone is  $v = 1/3\pi r 2(h)$ .

Height (h)



Radius (r)

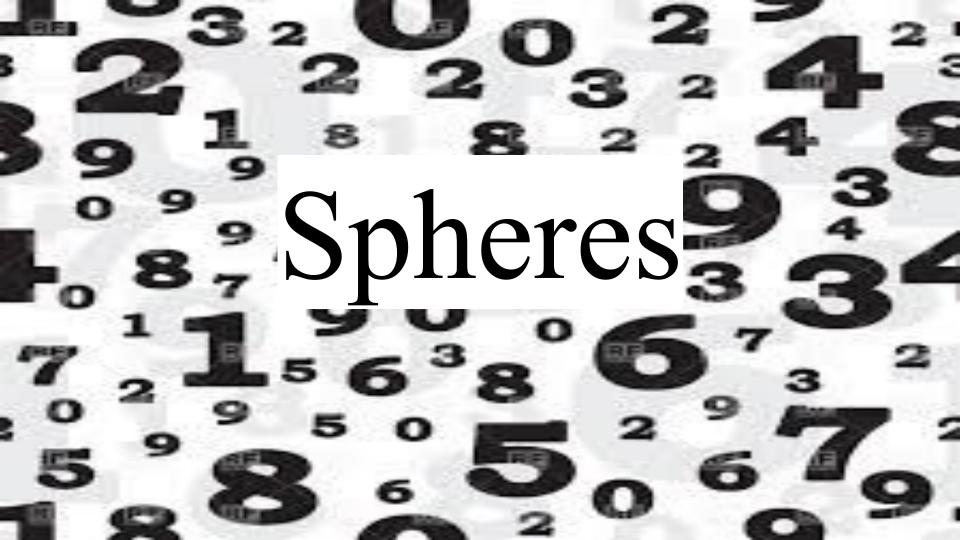


# Real-World Examples

- ~ Ice cream cones
- ~ Party hats
- ~ Paper cups



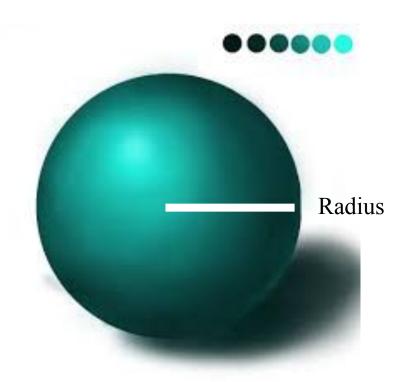




## Volume of a Sphere/Hemispheres

The formula is  $v = 4/3\pi(r3)$  Spheres

The formula is  $v = 2/3\pi(r3)$  Hemisphere



## Real-World Examples of Spheres

~Soccer Ball

~Basketball

~The Earth







## Useful tips and information

Make Sure you follow through each of the steps

REMEMBER that the power of 2 doesn't mean multiplying by 2, but rather multiplying by itself. (ex. 4 x 4)

Use 3.14 for  $\pi$ 

Do your Best!