

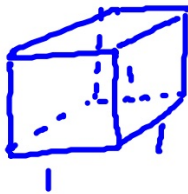
Potato Mini Lab

Purpose: How does the size and shape of an object influence cell transport?

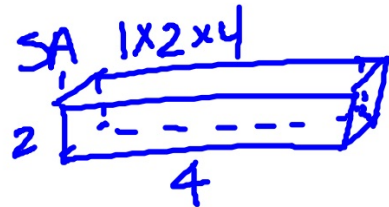
Surface Area:

Volume:

Size (cm)	SA	V	decimal SA:V	Distance to Center
1X1X1				
2X2X2				
1X2X4				

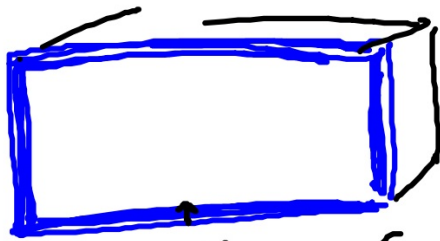


$(l \times w) h = \text{---}$ $V = l \times w \times h$
 $l \times w$ front
back
top
bottom
L
R

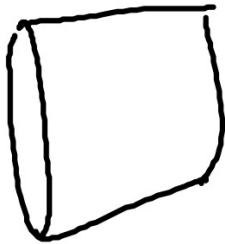


x
L
R

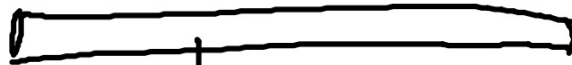
<u>Size</u>	<u>SA</u>	<u>V</u>	<u>SA:V</u>	<u>Time to Center</u>
1x1x1			6	1 st
2x2x2			3	3 rd
1x2x4			3.5	2 nd



small flat



distance from edge → how far did the iodine travel?



↓ nutrients

What did you learn?

Transport

High conc. of iodine

Diffusion

Low " " "

Size

Equilibrium

Shape

Small

Time to diffuse to center

Big

Thick

* Application: 3 examples in body
that maximize SA:V

Thin

SA:V