

1. Go to the website below.

<http://www.shodor.org/interactivate/activities/SurfaceAreaAndVolume/>

2. Move the levers on the page to find the Volume and Surface Area for each number. Record the numbers in columns labeled **Volume** and **S. Area**.

3. Change the attribute using the levers and record the new volume and surface area.

#	$w$	$d$	$h$	Volume	S. Area	Change the Attribute	New Vol	New SA
1	1	2	3			Double $h$		
2	2	2	2			Square $w$		
3	8	6	10			Divide $h$ by 2		
4	5	4	8			Times $d$ by 3		
5	3	3	6			Divide $h$ in half		

4. Answer the questions below.

A. Look at #1 and compare the new volume to the old volume. What changes do you see?

B. Look at #2 and compare the new volume to the old volume. What changes do you see?

C. Look at #3 and compare the new volume to the old volume. What changes do you see?

D. Look at #4 and compare the new volume to the old volume. What changes do you see?

E. Look at #5 and compare the new volume to the old volume. What changes do you see?

F. What can we conclude about how the volume will change when an attribute changes?

G. Compare the surface areas. Is there a pattern?