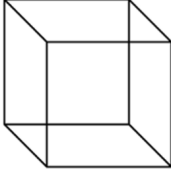
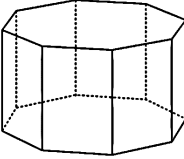

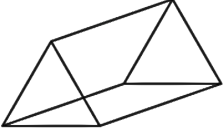
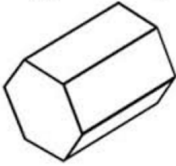
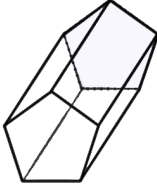


# SOLIDS FOR YOUR TORSO

- YOU NEED 4 OF THESE FIGURES
- CHOOSE 1 OR 2 FROM COLUMN A
- IF YOU CHOOSE 1 FROM COLUMN A, THEN YOU NEED 3 FROM COLUMN B
- IF YOU CHOOSE 2 FROM COLUMN A, THEN YOU NEED 2 FROM COLUMN B

COLUMN A Choose 1 or 2 from this column	COLUMN B Choose 2 or 3 from this column
<p>CUBE</p> 	 <p>OCTAGONAL PRISM</p>
 <p>RECTANGULAR PRISM</p>	 <p>TRIANGULAR PRISM</p>
	 <p>HEXAGONAL PRISM</p>
	 <p>PENTAGONAL PRISM</p>

# TORSO SHAPES

✓ My 4 solids are:

Shapes I will have on my drawing:

*Example:*

*Triangular prism*

*Triangle*

—

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

✓ Are my shapes solidly connected together? \_\_\_\_\_

✓ Dimensions of my solids:

\_\_\_\_\_ Length= \_\_\_\_\_ Width= \_\_\_\_\_

\_\_\_\_\_ Length= \_\_\_\_\_ Width= \_\_\_\_\_

\_\_\_\_\_ Length= \_\_\_\_\_ Width= \_\_\_\_\_

\_\_\_\_\_ Length= \_\_\_\_\_ Width = \_\_\_\_\_

✓ I am thinking about using my circuit to

\_\_\_\_\_

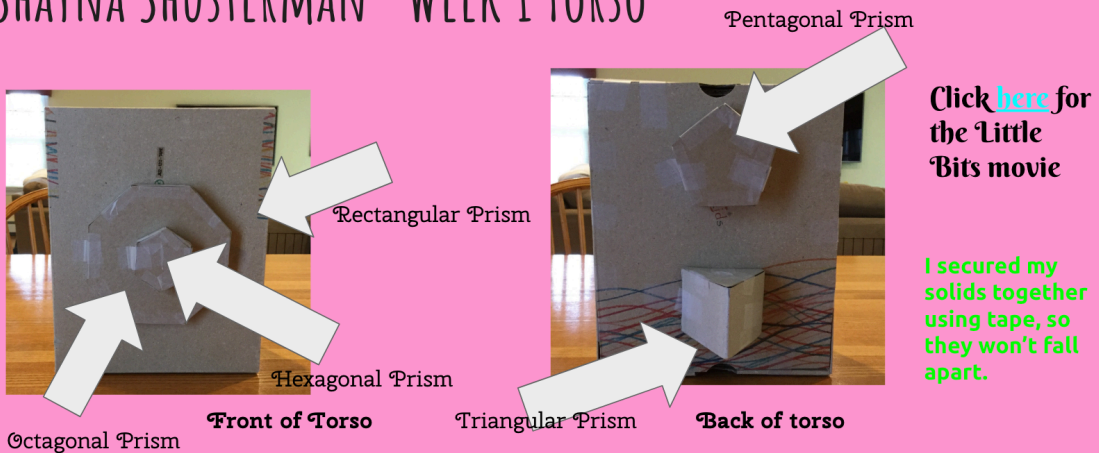
✓ And I will place the circuit:

\_\_\_\_\_

# SLIDE SAMPLES

## SLIDE # 1 SAMPLE

SHAYNA SHUSTERMAN - WEEK 1 TORSO



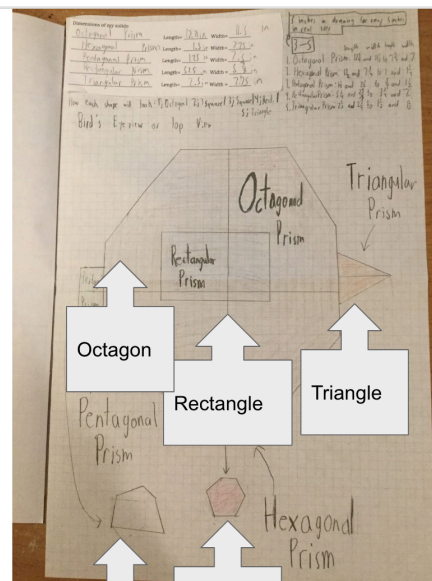
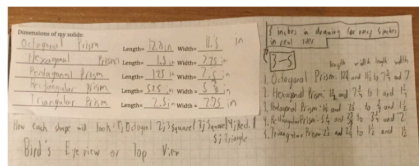
**Highlights~** Watching something that I have imagined in my head come together was very cool and exciting and taping the shapes together was very easy.  
**Hardships~** It was very hard to cut the cardboard to make my shapes, and I had to keep trying and trying to get the shapes right. Also, I couldn't figure out how to fit my torso in one picture.

## SLIDE # 2 SAMPLE

PRANIT SHAH; WEEK 2: SCALE

My highlights for this part of the project is that it was easy and fun putting the shapes together on your graph paper, and I liked how my project looked from above so it might change how I present my project.

The hardest part of this project was when I changed my scale because my project wouldn't fit on the graph paper with the scale 4:3, I ended up changing it to 5:3.

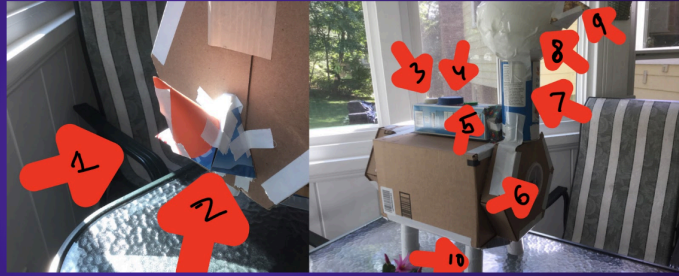


# SLIDE #3 SAMPLE

## Kyle LeVangie: Week Three Appendages

Hardships: It was hard to make my head (which is styrofoam) stop shedding so I put a plastic bag over it.

Highlights: It was fun to see what my project became. I also enjoyed using the glue gun.



1. Cone
2. Square Pyramid
3. Circle 2
4. Circle 3
5. Circle 4
6. Circle 1
7. Cylinder
8. Sphere
9. Triangular pyramid
10. Cylinder

# FINAL SLIDE SAMPLE

SARAH CONCAGH



I am proud of my final creature because I worked really hard on it and I think it turned out well. One thing I would change is the legs. One thing that helped me practice math was the scaling. It was a good refresher on how to scale things down and then graph it. I think this project was very well run this year. I liked how it was broken up into different assignments so it wasn't overwhelming and I liked how we had our folders so we could work ahead in the weeks if we wanted. I also think that not doing that perimeter and area was a good idea. I think it would have been more rushed and stressful if we had to and it was just a review. My story is about Lucy the ladybug who tries to be helpful when planning her friends birthday party, but ends up messing up in the process.

Appendix 4A

# CALCULATIONS: ASSIGNMENT # 2

Scale factor for my project will be:

1" : 1/2" (write it on your graph paper too)

Shape # 1 is a:  
hex prism 3 dimensional  
hexagon on drawing

Dimensions of the actual shape:  
 Length: 3.5"  
 Width: 4"

Scale calculations (2 proportions below for length and width):

<u>Length</u> =	<u>width</u> =
$\frac{1}{.5} = \frac{3.5}{x}$	$\frac{1}{.5} = \frac{4}{x}$
$x = 1.75"$	$x = 2"$

Shape # 2 is a:  
Rect prism 3 dimensional  
Rect on drawing

Dimensions of the actual shape:  
 Length: 3.2"  
 Width: 2"

Scale calculations (2 proportions below for length and width):

<u>Length</u> =	<u>width</u> =
$\frac{1}{.5} = \frac{3.2}{x}$	$\frac{1}{.5} = \frac{2}{x}$
$x = 1.6"$	$x = 1"$

Shape #1 is a: \_\_\_\_\_

\_\_\_\_\_ 3 – D (on my creature)

\_\_\_\_\_ as a polygon on my drawing

Dimensions of the actual shape: (in inches)

Length =

Width =

Scale Calculations: (2 proportions below: 1 for length and 1 for width):

Shape #2 is a: \_\_\_\_\_

\_\_\_\_\_ 3 – D (on my creature)

\_\_\_\_\_ as a polygon on my drawing

Dimensions of the actual shape: (in inches)

Length =

Width =

Scale Calculations: (2 proportions below: 1 for length and 1 for width):

Shape #3 is a: \_\_\_\_\_

\_\_\_\_\_ 3 – D (on my creature)

\_\_\_\_\_ as a polygon on my drawing

Dimensions of the actual shape: (in inches)

Length =

Width =

Scale Calculations: (2 proportions below: 1 for length and 1 for width):

Shape #4 is a: \_\_\_\_\_

\_\_\_\_\_ 3 – D (on my creature)

\_\_\_\_\_ as a polygon on my drawing

Dimensions of the actual shape: (in inches)

Length =

Width =

Scale Calculations: (2 proportions below: 1 for length and 1 for width):

# Creativity and Effort Rubric

	Extending	Achieving	Developing	Beginning
<b>Effort</b>	<ul style="list-style-type: none"> <li>✓ Complete</li> <li>✓ Detailed</li> <li>✓ Great pride in work</li> <li>✓ Work is beyond what is expected</li> <li>✓ Shows personal touch</li> </ul>	<ul style="list-style-type: none"> <li>✓ Complete</li> <li>✓ Detailed</li> <li>✓ Pride in work</li> <li>✓ Work is what is expected</li> </ul>	<ul style="list-style-type: none"> <li>✓ Some part not complete</li> <li>✓ Little detail</li> <li>✓ Work is a little less than what is expected</li> </ul>	<ul style="list-style-type: none"> <li>✓ Some parts not complete</li> <li>✓ Little to no detail</li> <li>✓ Work is not what is expected</li> <li>✓ Project looks forced</li> <li>✓ Lacks accuracy and/or clarity</li> </ul>
<b>Creativity</b>	<ul style="list-style-type: none"> <li>✓ Many new and original ideas; unique</li> <li>✓ Does not look like all the others</li> <li>✓ Eye Catching</li> <li>✓ Exemplary use of color, texture, shapes and spacing of materials</li> </ul>	<ul style="list-style-type: none"> <li>✓ Some original ideas</li> <li>✓ Visually appealing</li> <li>✓ Good use of color, texture, shapes and spacing of materials</li> </ul>	<ul style="list-style-type: none"> <li>✓ Some new ideas or improvements, but most is predictable</li> <li>✓ Some parts visually appealing</li> <li>✓ Experimenting with the use of color, texture, shapes and spacing of materials</li> <li>✓ Experiments with creating a new model</li> <li>✓ Seems familiar and not new.</li> </ul>	<ul style="list-style-type: none"> <li>✓ No original ideas; relies on existing models or ideas</li> <li>✓ Not visually appealing</li> <li>✓ None or very little use of color, texture, shapes</li> <li>✓ Materials are not connected effectively</li> </ul>
<b>Neatness</b>	<ul style="list-style-type: none"> <li>✓ Patiently completed</li> <li>✓ All parts are well attached</li> <li>✓ Well organized</li> <li>✓ Clean and neat</li> </ul>	<ul style="list-style-type: none"> <li>✓ Completed</li> <li>✓ Parts are attached, but not securely</li> <li>✓ Clean and neat</li> <li>✓ Organized</li> </ul>	<ul style="list-style-type: none"> <li>✓ Completed in a hurry</li> <li>✓ Parts are wobbly</li> <li>✓ Work is a little messy</li> </ul>	<ul style="list-style-type: none"> <li>✓ Not completed</li> <li>✓ Parts are falling off</li> <li>✓ Not organized</li> <li>✓ Messy work – not clean and neat</li> </ul>





Perimeter – Polygon 1

Shape: \_\_\_\_\_

Sketch your shape here and then determine the perimeter.

Write on your drawing P = \_\_\_\_\_

Area – Polygon 1

Shape: \_\_\_\_\_

Sketch your shape here, show the formula you will use \_\_\_\_\_, and then show your work.

Write on your drawing A = \_\_\_\_\_

Perimeter – Polygon 2

Shape: \_\_\_\_\_

Sketch your shape here and then determine the perimeter.

Write on your drawing P = \_\_\_\_\_

Area – Polygon 2

Shape: \_\_\_\_\_

Sketch your shape here, show the formula you will use \_\_\_\_\_, and then show your work.

Write on your drawing A = \_\_\_\_\_

# VOLUME AND SURFACE AREA OF RECTANGULAR PRISM

All volumes and surface areas are of the actual creatures, not the scaled drawing!

Length : \_\_\_\_\_ Width : \_\_\_\_\_ Height: \_\_\_\_\_

## Surface Area

Formula:

Write on your drawing SA =

## Volume

Formula:

Write on your drawing V =

TRIANGLE 1: TYPE OF TRIANGLE \_\_\_\_\_

SCALE CALCULATIONS:

TRIANGLE 2: TYPE OF TRIANGLE \_\_\_\_\_

SCALE CALCULATIONS:

TRIANGLE 3: TYPE OF TRIANGLE \_\_\_\_\_

SCALE CALCULATIONS:

Perimeter of Triangle # \_\_\_\_.

Sketch it here and then compute the perimeter.

Area of Triangle # \_\_\_\_.

Sketch it here. Formula you will be using: \_\_\_\_\_. Compute the area.

# CYLINDER

Actual cylinder Height = \_\_\_\_\_ Actual cylinder width (diameter) = \_\_\_\_\_

Scale calculations:

Height:

Width:

# SPHERE

Sphere – determine the diameter from the circumference. Measure the circumference and then use a formula to determine the diameter. Formula to use: \_\_\_\_\_.

Scale calculations using the diameter:

Circumference of the circle you have drawn on your graph paper to represent your sphere.

Formula:

Calculations:

Area of the circle you have drawn on your graph paper to represent your sphere.

Formula:

Calculations:

# CIRCLES

DIAMETER OF ACTUAL CIRCLE: \_\_\_\_\_

Scale calculations: (use the diameter and proportion)

## Circumference of scaled circle

Formula: \_\_\_\_\_

Work:

## Area of scaled circle

Formula: \_\_\_\_\_

Work: