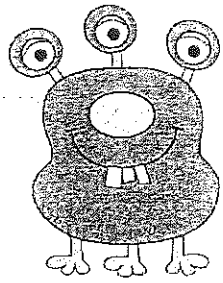
packet #1

Updated 6/18



CREATURE FEATURE – ACC

Due Date	Task #	Explanation	Possible Points	Your Points	Comments
	1	Make 5 solids from cardboard (they MUST be 3 Dimensional). Choose your shapes from the chart on Appendix 1.	10 pts		
	2	List your solids and the polygons that will appear on your drawing on Appendix 2.	5 pts		
	3	Give the dimensions of your solids on Appendix 2.	10 pts		
	4	Make your Slide # 1(see Appendix 3 for sample). Then, upload your slide to your class' slide show. Be sure to keep the slides in alphabetical order. Include: • Picture of your torso (2 pts) • Arrows labeling your shapes (4 pts) • Clip from Little Bits Workshop (be sure to give me permission to view) (3 pts) • Highlights (2 pts) • Hardships (2 pts) • Grammar/spelling (2 pts)	15 pts		
	5	Decide on your scale factor. Remember your drawing of the creature will need to fit on the graph paper you were given. State your scale factor here: _____*in* : ____ *in.* This will be your scale factor for the entire project. Write it on your graph paper. You may not use a scale of ½" = 1" or ¼' = 1"	2 pts		
	6	Scale the length and width of your torso shapes using proportions. Show your work on Appendix 4. There is a sample completed for you on Appendix 4a.	10 pts		
	7	Use your scaled measurements to draw your creature on the graph paper accurately. Use inches. When drawing round your measurements to the nearest quarter inch. Be sure to draw your scale drawing as your creature looks. Your 3-dimensional shapes will be drawn as polygons on	24 pts		

		your graph paper. You may color your drawing, but it does not have to be colored in its final colors. Drawing must include: • 5 polygons (5 pts) • All polygons labeled (like "rectangle") Do NOT label them on your actual creature. (4 pts) • Accurate drawing with measurements from your scale calculation sheet. (Appendix 4). (8 pts) • Neatness (3 pts) • Creativity and effort (see Appendix 5 for rubric) (4 pts)			
	8	Make your Slide #2. (Sample is on Appendix 3) Include: • Photo of your graph paper (2 pts) • Label shapes with arrows (2 pts) • Put your scale factor clearly on your slide (2 pts) • Highlights (2 pts) • Hardships (2 pts) • Grammar/spelling (2 pts)	12 pts		
	9	Find the perimeter and area of all of your polygons as they are <u>drawn on your graph paper</u> (not of the real creature). Measure in inches and round to the nearest quarter inch. Use Appendix 6 to show your work.	10 pts		
	10	Measure the actual length, width and height of the rectangular prism, which is on your creature. Record on Appendix 7.	3 pts		
	11	Use your measurements from #10 and calculate the surface area and volume of your rectangular prism. (The ACTUAL rectangular prism; not the drawing) Show your work on Appendix 7.	4 pts		
	12	Write the surface area in the polygon on your drawing and label it SA = _____.	2 pts		
	13	Write the volume in the polygon on your drawing and label it V = _____.	2 pts		
	14	Add 1 obtuse, 1 acute, and 1 right triangle to the torso of your creature. These can be cut out of any material and do not need to be built in 3-D.	6 pts		

	15	Use your scale factor and proportions to determine the size of the triangles on your drawing. Do this on Appendix 8.	6 pts		
	16	Draw your triangles to scale on your graph paper.	6 pts		
	17	Find the perimeter of your 3 triangles on your graph paper (scale drawing, not actual triangle). Show the calculations for the perimeter on Appendix 9.	3 pts		
	18	Find the area of your 3 triangles on your graph paper (scale drawing, not actual drawing). Show the calculations for the area on Appendix 9.	3 pts		
	19	Measure the 3 angles of your 3 triangles on your graph paper with a protractor. Clearly write each measurement at its angle on the graph paper.	6 pts		
	20	Make your Slide #3. (see sample on Appendix 3) Include: • Photo of your graph paper (2 pts) • Label your triangles with arrows (2 pts) • Circle the perimeter and area (2 pts) • Highlights (2 pts) • Hardships (2 pts) • Grammar/Spelling (2 pts)	12 pts		
	21	Add 4 appendages to your creature. They will be 3-D. You must have at least one cylinder. You must also add 3 other appendages like cones or pyramids. 2 of your appendages may be the exact same figures.	4 pts		
	22	Scale your appendages by using your scale factor and showing your proportions for height and width on Appendix 10.	8 pts		
	23	Draw your appendages to scale on your drawing. They may look like rectangles because you are not drawing in 3-D.	4 pts		
	24	Make your Slide #4. (See sample on Appendix 3) Include: • Photo of your creature (2 pts) • Label appendages with arrows (2 pts) • Highlights (2 pts) • Hardships (2 pts) • Grammar/spelling (2 pts)	10 pts		
	24	Add one sphere to your creature.	2 pts		
	25	Scale your sphere by using the diameter. Get the diameter by measuring the circumference and	3 pts		

		using the correct formula (use your reference sheet). Show your work on Appendix 11.			
	26	Draw the sphere to scale on your drawing. It will look like a circle.	3 pts.		
	27	Calculate the circumference and area of the circle on your drawing (which represents your sphere). Use Appendix 11.	4 pts		
	28	Write C = _____ and A = _____ on your drawing.	2 pts		
	29	Add 4 different size circles (really flat cylinders) to your creature. (they are items like bottle lids, rings, coins, buttons).	4 pts		
	30	Scale the circles by measuring the diameter. Show your work on Appendix 12.	8 pts		
	31	Add the scaled circles to your drawing. Label them circle 1, circle 2, circle 3 and circle 4.	8 pts		
	32	Find the circumference and area of your circles on your drawing. Show your work on Appendix 12.	8 pts		
	33	Write C = _____ and A = _____ in your circles.	4 pts		
	34	Make your Slide #5. Include: • Photo of your creature (2 pts) • Label sphere, and circles with arrows (2 pts) • Highlights (2 pts) • Hardships (2 pts) • Grammar/spelling (2 pts)	10 pts		
	35	Final creature: • Measurement check (10 pts) • 5 solids (5 pts) • 3 triangles (3 pts) • 4 appendages (4 pts) • Sphere (2 pts) • 4 circles (4 pts) • Stands alone (5 pts) • Your name and creature's name on creature (2 pts) • Stays together with no falling parts (6 pts) • Circuit included (5 pts) • Creative, as shown by: (8 pts) - Fun, lively, engaging - Visually exciting - Original ideas - Innovative - Imaginative	54 pts		

	36	Make your final slide #6. (See sample in Appendix 3) Include: • Photo of your final creature (no labels necessary) (2 pts) • "Clip" of your Little Bits in action – be sure to give permission. In your clip describe how it works in your creature. (5 pts) • Final Reflection: in paragraph form, include your feelings about the project, what you learned, what you reviewed, what you practiced. (5 pts) • A quick summary of your story. (3 pts) • Grammar/spelling (2 pts)	17 pts		