**DESIGN A VENDING MACHINE INVENTOR CONTEST**

**Rough Draft Due:** October 30th, 2017 – your design and idea sketched out

**Final Project Due**: November 9th, 2017 – your illustration of design and essay

**Assignment:** Imagine you’re an engineer and you want to create a vending machine that helps solve a problem people have. Write out your plan and include an illustration that explains the different aspects of the design.

**Read:** Read the article First-Aid Dispenser attached to this assignment. Think about what other items might people need quick access to. Use this design process to plan your own machine.

* **DEFINE THE PROBLEM**: Where might a specialty vending machine be helpful? What items would it dispense? How would it work? Who would the customers be? Write a detailed description of your idea. Include information about the criteria and constraints you’d need to consider for your design to be successful.
* **BRAINSTORM SOLUTIONS:** Think about how you could turn your idea from step 1 into a reality. Come up with several different design solutions for your vending machine. Write out step-by-step plans, draw diagrams, or make models for each design to help you envision how your machine would be used.
* **PLAN AND IMPROVE IT:** Pick your best solution from step 2. Use it to create a blueprint for your vending machine. Pair up with a classmate and discuss your designs. Offer each other ideas on design features that might need to be tweaked or added. **(Due 10/30/2017 for peer review)**
* **OPTIMIZE YOUR DESIGN**: Based on the feedback you received in step 3, make adjustments to your original plans. Keep going back to the drawing board until you’re satisfied. Then enter our contest.
* **ANALYZE IT**: Survey people to gauge their interest in your machine. Research to see if anyone has patented your design yet.

**Requirements:**

* Essay explaining the design of the vending machine - no more than 300 words. Essay must be printed out and in MLA format (30 points)
* Illustration on 8 ½ x 11 copy paper with labels; color encouraged (15 points)
* Entry form completed and signed by parent/guardian