Teacher: Mr. Thomas
Class: 6th grade R & D
PERIOD: 7 & 8

UPCOMING REMINDERS / IMPORTANT DATES	
	Class Project for school wide assembly
	Hat Research, Design & Build
	Greeting Card Research, Design & Build
-	Simple Machines Activities
	Syllabus
	First day computer setup
	SmartPass nBookmarkot working? Fill out this form
	Submit all written assignments in Google Classroom unless noted (GC is where assignments are graded & scores go directly to Infinite Campus. Please do NOT email assignments to teacher(s).

DATE	In-Class Assignments	HOMEWORK
5/19/25	Watch the deep dive video and answer the worksheet	

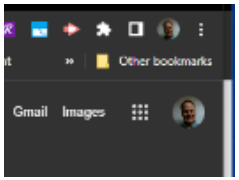
	Lab Clean-up Row1- glue guns & countertops Row 2- Organize supplies Row 3- empty and clean class cabinet Row 4- Legos Row 5- Cardboard and paper area	
	Hat Project	
	5/15/25 is the final day for any missing/ incomplete/ not finished assignments to be turned in, this includes all assignments assigned before 5/12/25. Assignments marked as a "0" will not be re-graded.	
10/20- 10/24	If you have a late assignment to turn in- do the following 1. Make sure it is turned in (Google Classroom) 2. Click the share button on the google doc 3. Email the link and remind Mr. Thomas which period you have class- thank you 4. Hat Project a. Fabricate Hat i. **Utilize a template/ pattern to trace the hat pattern** ii. **Cut following the pattern** iii. **Get approval of the paper pattern build before using cardboard** iv. **Utilize a template/ pattern to fabricate the hat** v. **Cut following the pattern** vi. **Assembly of hat** vii. **Finishing- cover of all gaps and plain cardboard (visible when worn)- must cover underside as well**	++

Oct 10, 2025 Oct 13, 2025 Oct 14, 2025 Oct 15, 2025	1. Hat Project- design (making the paper pattern) a. Research hat building/ design websites b. Cite Websites i. Print Template or Pattern- no hat can be made w/out a hat template or pattern 1. Fabricate Hat **a. Utilize a template/ pattern to trace the hat pattern** **b. Cut following the pattern** **c. Get approval of the research & paper pattern build before using cardboard**	
Oct 8, 2025 Oct 9, 2025	2. Hat Project a. Research hat building/ design websites b. Cite Sources c. Print Template- i. on the paper provided-cut a hole the size of your head ii. Place it on the screen with zoom at 100% iii. make sure the template (on the computer) is ½" larger in each direction than that iv. Keeping template the same size print and tape together d. Upon approval of steps and template i. Print Template or Pattern- no hat can be made w/out an approved hat template or pattern	

Oct 6, 2025	**Note for Mr. Thomas's absence on 10/6- students will** **1. print their paper pattern (one a single sheet or however many the pattern/ template is on- most of you do not need to resize it- this is the tiny practice assembly)** **2. Watch the video you inserted in the research document to learn how to make the hat- Mr. Thomas or sub will not tell you how to do it.** **3. Cut around the solid lines, cut the dotted lines also (if needed - often those are fold lines** **4. Shape and use glue sticks (not hot glue- on my absence) to glue up the pattern/ template** **5. Decide if this is the template you like, if not make another template, then make another template.** **6. If completed, put your name on it, store it in yor notebook or locker (yes it can be folded if need be)** **7. Done early? Make the 2nd best template to compare and determine which is best.** 1. Hat Project a. Google Classroom has the Hat assignment b. Research hat building/ design websites to find: i. Websites/ Video (how to make hat), ii. templates/ patterns (how to cut out the cardboard) iii. images (for inspiration)	
Oct 1, 2025	1. Hat Project Introduction a. Find Video (how to make hat), templates/ patterns (how to cut out the cardboard) & images (for inspiration) b. Class examples c. Research 3 hat types- determine the… 1. quality of resources (explanations of step to make- including picts) 2. style that you like the most 3. ability to complete the style of hat	

	Greeting Card Research, Design & Build	
Dec 5, 2025 Dec 8, 2025 Dec 9, 2025	Deploy (build final card on card stock)- Pop- up Card Activity- see google classroom for Pop- up Card doc. ● Outside, front (single card stock)-computer print of images ○ Images are centered, utilizing page and coordinated with pop- up feature ● Inside, top & bottom (single card stock)-computer print of image(s) ● Pop- up feature, placed for maximum utilization, pops up automatically when the card is opened,third paper-computer print of images	
Dec 2, 2025 Dec 3, 2025	Deploy (build paper prototype)- Pop- up Card Activity- see google classroom for Pop- up Card doc. ● Show this paper prototype prior to printing final card stock- it will be graded in google classroom	
Nov 20, 2025 Nov 21, 2025 Nov 24, 2025	Research & Design- Pop- up Card Activity- see google classroom for Pop- up Card doc. 1. Complete the Research document (if not already completed) + turn it in → Google Classroom 2. Complete you Design - make sure to do two designs, include images and text for the inside of the card (the outside is not required 3. Place your text & images on the templates (pop- card section of Google classroom) examples----> outside & Inside If needed make a copy of mine and insert your images & text 4. Print (MS Color 211 printer- NOT the hallway printers) out your card and put it together (without glue- just to see if it functions) 5. Print (MS Color 211 printer- NOT the hallway printers) out you pop up image 6. Develop your pop- up mechanism Design- Pop- up Card Activity- see google classroom for Pop- up Card doc. (instructions above)	
Nov 18, 2025 Nov 19, 2025	Research- Pop- up Card Activity- see google classroom for Pop- up Card doc.	
	Simple Machines	
	Complete 2nd Lego Builds to class	

Nov 17, 2025 Nov 14, 2025	**EQ- How can we design and build simple machines using LEGOs & calculate their Ideal Mechanical Advantage (IMA) for a specific task?** Simple Machines- Research, Design & Build w/Lego- gears, pulleys & levers (by row) 1. Complete the 2nd Build Worksheet as needed for the build (located in Google classroom)	
Nov 12, 2025	**EQ- How can we manipulate the design of levers to control the relationship between effort and resistance forces, and how does this impact their usefulness in different applications?** Simple Machines Worksheet Levers -located in google classroom ● Best Lego build - criteria located in Google classroom	
Nov 11, 2025	**EQ- How do gears manipulate speed and torque to perform work?** Simple Machine Research Journal- Gears (located in Google classroom) ● turn it in (google Classroom) upon completion- if it's not turned in=0	
Nov 10, 2025	**EQ- How can we manipulate pulley systems to change the amount of force needed to lift an object, and how does this relate to the distance the object moves?** Simple Machine Research Journal- Pulley (located in Google classroom) ● turn it in (google Classroom) upon completion- if it's not turned in=0	
Nov 5, 2025 Nov 6, 2025	**EQ- How can we design and build simple machines using LEGOs & calculate their Ideal Mechanical Advantage (IMA) for a specific task?** Simple Machine Worksheet- Inclined Plane (located in Google classroom)- complete the last two questions at the bottom of worksheet Simple Machines- Lego build- Legos assigned by row- ● Research your Lego build - criteria located in Google classroom	
Nov 4, 2025	**EQ- How does an inclined plane reduce the force needed to lift an object, and what are the trade-offs associated with this mechanical advantage?** Nov 4, 2025 - **Virtual Day- you will be assigned the Inclined Plane Research Journal (located google classroom) Research Journal to work remotely.**	

	Mr. Thomas will give a quick review of these on the following day. You are expected to have completed them or at least done what you could figure out. Simple Machine Worksheet- Inclined Plane (located in Google classroom) ● turn it in (google Classroom) upon completion- if it's not turned in=0	
Oct 30, 2025	**EQ- How does the shape and size of a wedge affect its ability to overcome resistance and perform work?** Simple Machine Worksheet- Wedge (located in Google classroom) ● turn it in (google Classroom) upon completion- if it's not turned in=0	
Oct 29, 2025 Oct 30, 2025	**Review the Syllabus Review** **EQ- How does the relationship between the wheel's radius and the axle's radius affect the force needed to move a load?** Simple Machine Worksheet- Wheel & Axle (located in Google classroom) ● turn it in (google Classroom) upon completion- if it's not turned in=0	
	Syllabus	
Oct 27, 2025	1. Syllabus on Canva 2. Read Course Syllabus & Classroom Expectation- carefully you are responsible to know the expectations- especially for computer lab rules (click on the link) behavioral expectations, late assignments, bathroom pass procedure, required items to bring to class daily	
	First day computer setup	
Oct 27, 2025	1. Turn on Sync- click the head & shoulders where my image is 2. Bookmark this document(the one you're looking at now)- you may it need it to answer what is going on daily if you are present or absent 3. 	1. Located in Google classroom ★ DUE = Jan 23, 2024
	Rows below intentionally left blank	

Day	4 Use the final research and time, scroll screen. Which users will have the most impressive product? Display of item in the products Displaying multimedia (gif, etc) Ease of use Name and then fit in product How will you adapt it to different size products? How to use the tools the Structure design Does still the product hold the name Proof safe measures to hold the product (gift only) How will the video be kept safe (gif only) How to make it spot fast (gif only)	
Day	5 Website Evaluation Part1 6 Website Evaluation Part2	