

2018 FVC Schedule						Notes
white = general, minds-on	gray = general, hands-on	yellow = topical, minds-on	orange = topical, hands-on	light-blue = independent, minds-on	medium-blue = independent, hands-on	
	Monday, Feb. 19	Tuesday, Feb. 20	Wednesday, Feb. 21	Thursday, Feb. 22	Friday, Feb. 23	
9:00- 9:30 AM	<u>Dr. E.</u> : Invention problem strip activity [2]	<u>Mr. C.</u> : Review safety practices.	<u>Mr. C.</u> : Review invention & safety practices.	<u>Mr. C.</u> : Review invention & safety practices.	<u>Mr. C.</u> : Review invention & safety practices / <u>Sci.Lit.</u> : Lesson on brochures	
9:30- 10:00 AM	<u>Dr. E.</u> : Introductions & "What's your fave invention?" Student-defined "invention." --> <b>synthesize to "useful and unique"</b> Hand-out guides & introduce the week's activities [P10-P11]	<u>Mr. P.</u> : Inventing is a team sport. Four Corners to aid in team selection [7]	<u>Dr. Z.+Mr. K.</u> : Introduction to the Diddley Bow [41-42] / <u>Sci.Lit.</u> : Review procedure writing [43-46]	<u>Mr. C.</u> : Meet Jay Silver [47]	<u>Dr. E.+Mr. P.</u> : Invention Challenge: Make second prototype [ITERATION C2]	
10:00- 10:30 AM	<u>Mr. C.</u> : Safety first! [13] Rules posted. Keep yourself safe. Keep others safe. Keep workspace clutterfree.	<u>Mr. J.</u> : Review how speakers work [22-23] / <u>Lit.</u> : language and genre component of procedure writing [24-27]	<u>Dr. Z.+Mr. S.</u> : Invent an Electric Instrument, pt. 1 [42-43]: Set criteria, constraints, and type of instrument.	<u>Mr. S.</u> : Invent an Electric Instrument, pt. 3.1: Attach the pickup to an instrument [ITERATION E1]	<u>Dr. E.+Mr. P.</u> : Peer-review of Invention Challenges [ITERATION C2]	
10:30- 10:40 AM	Break	Break	Break	Break	Break	
10:40- 11:00 AM	<u>Dr. E.</u> : Design a cell phone stand. [3-4.25] Draw first. Make your stand.	<u>Mr. P.</u> : Build speakers: Iteration 1 [24-27]	<u>Mr. S.</u> : Invent an Electric Instrument, pt. 2: Make a Pickup [43-46]	<u>Mr. J.+Mr. S.</u> : Peer-review of instruments ITERATION E1	<u>ALL</u> : Prepare for showcase: Revise brochures, finalize prototypes, complete Invention Worksheets, film videos	
11:00- 11:30 AM	<u>Dr. E.</u> : Think about your stand. Share design / process. Did you get someone else's opinion? What would you do the same or differently?	<u>Mr. P.</u> : Peer-review of speakers. [29-30]		<u>Mr. J.+Mr. S.</u> : Invent an Electric Instrument, pt. 3.2: Attach the pickup to an instrument [ITERATION E2]		
11:30 AM- Noon	<u>Mr. J.</u> : Intro to Sound: Round-Robin [11-12]	<u>Mr. P.</u> : Build speakers: Iteration 2	<u>Dr. Z.</u> : Intro to Invention Chall. [49] ( <i>curious, empathetic leaders</i> )	<u>Mr. J.+Mr. S.</u> : Peer-review of instruments ITERATION E2		
Noon- 12:30 PM	Lunch	Lunch	Lunch	Lunch	Lunch	
12:30- 1:00 PM	<u>Mr. C.</u> : Dissect earbuds* [13-14] * <i>Need hammers &amp; boards (NOT in kit)</i>	<u>Mr. S.</u> : Make a Musical Instrument: Iteration 1 [38-40]	<u>Dr. Z.</u> : Explore team members' 10 ideas (30-40 / group) [52-53] Pick top 3-5 problems by clumping similar problems and discarding problems that may be less beneficial.	<u>Ms. M.</u> : Invention Challenge: Make first prototype [ITERATION C1] / <u>Sci.Lit.</u> : Rough Draft of Electric instrument brochure	<u>Dr. E.</u> : Showcase of Winter Camp with special guests (LMIT, BC, Clarks, parents) Presentation of certificates	
1:00- 1:30 PM	<u>Mr. J.</u> : Intro to speakers & electromagnetism [14-15] / <u>Sci.Lit.</u> : intro to procedure writing	<u>Mr. P.</u> : Peer-review of Musical instruments	<u>Dr. Z.</u> : Select 1 Problem & draw multiple solutions; use readily available materials to make models (grab bag inventing, cardboard, recycle bin); SCAMPER [53-54,57]			
1:30- 2:00 PM	<u>Mr. S.</u> : Build an electromagnet [16-20] / general overflow time	<u>Mr. S.</u> : Make a Musical Instrument: Iteration 2	<u>Dr. Z.</u> : Complete Invention Worksheet for one problem. Continue to research and draw possible solutions. [54,58]	<u>Ms. M.</u> : Peer-review of Invention Challenges [ITERATION C1]		
2:00- 2:30 PM		<u>LC</u> : Introduce empathy. How does empathy relate to invention? How are you empathetic?	<u>AH</u> : Skype with Drew (drummer & inventor)	<u>OH</u> : Skype with a professional inventor (TBD).	<u>Dr. K.+Ms. K.</u> : Reflection and feedback	
2:30- 3:00 PM	<u>Mr. J.</u> : Summarize the day, go over key terms, preview tomorrow, then assign "10 ideas" HW (be <i>curious</i> to brainstorm about noise/sound/music); ask, "What'd you do today?" Complete Exit Slips (self-assessment + mini-CER)	<u>Mr. P.</u> : Summarize the day, go over key terms, preview tomorrow, re-frame "10 ideas" HW. (be <i>empathetic</i> to brainstorm about noise/sound/music.); ask, "What'd you do today?" Complete Exit Slips	<u>Dr. Z.</u> : Summarize the day, go over key terms, preview tomorrow, emphasize "one idea" *and* musical instrument as HW (discuss them with family/friends, and/or bring materials); ask, "What'd you do today?" Complete Exit Slips	<u>Dr. K.</u> : Summarize the day, go over key terms, preview tomorrow, emphasize "one idea" *and* musical instrument as HW (discuss them with family/friends, and/or bring materials); ask, "What'd you do today?" Complete Exit Slips	<u>Dr. K.+Ms. K.</u> : Exit Slips Interviews	
Extra material	Types of Team Members	Intro to Larynx		¿Meet Jay Silver?		
Essential Vocab.	invention, iteration, prototype, electromagnet, magnet, sound (waves)	speaker, empathy, pitch, criterion (pl.: criteria), constraints, vocal cords	pickup [electrical]	<i>emphasize general words:</i> invention, iteration, prototype, constraints, criterion (pl. criteria)	<i>emphasize general words:</i> invention, iteration, prototype, constraints, criterion (pl. criteria)	
Non-essential Vocab.	engineering, modification, patent, PhD, frequency, polarity, resonance, tympanic membrane	bass [sound range], cone, spider, surround, AWG, neodymium magnet, larynx	gauge, humbucker	<i>specific words for electronic musical instruments</i>	<i>specific words for electronic musical instruments</i>	