

STEAM Project Rubric

Item	Points Possible	Points Missing/comments
Card 1 Explain Waves	10	
What are Waves		
Mechanical vs. Electromagnetic (Similar/Different)		
Card 2: What is Sound?	14	
What kind of waves are sound waves?		
How do sound waves travel?		
Pitch. What determines pitch?		
Examples 1 2 3 4		
What makes sound loud?		
What units are used for sound intensity?		
Card 3: Doppler Effect	10	
What is the Doppler Effect?		
Give two different examples as either a video or a recording. 1 2		
Card 4 Echolocation	10	
What is Echolocation?		
3 animals that use echolocation 1 2 3		
Card 5: How does sound waves travel and interact?	10	
Explain Constructive Interference (Picture)		
Explain Destructive Interference (Picture)		
Explain Diffraction (Picture)		
Card 6: Your Instrument and "Marry had a little lamb"	10	
Your own instrument		
Video of your playing "Marry had a little lamb"		
The video shows your face as you play the music.		
Card 7: Putting it all together	12	
Recording 1 Caption: What is the sound, Pitch, Intensity		
Recording 2 Caption: What is the sound, Pitch, Intensity		
Recording 3 Caption: What is the sound, Pitch, Intensity		
Recording 4 Caption: What is the sound, Pitch, Intensity		
Recording 5 Caption: What is the sound, Pitch, Intensity		
Recording 6 Caption: What is the sound, Pitch, Intensity		
Card 8: Sound Absorption	8	
Explain Sound Absorption and why it might be needed.		
Material 1: What is the material and how does it absorb		
Material 2: What is the material and how does it absorb		
Material 3: What is the material and how does it absorb		
Material 4: What is the material and how does it absorb		
Material 5: What is the material and how does it absorb		
Material 6: What is the material and how does it absorb		
Presentation	10	
Introduce yourself, talk about your video, sounds, and absorption materials. Thanked the audience.		
Arts: Discuss the interrelated principals between music and other subject areas.	4	
Total		