



## Lights-Camera-Action

**Project Description:** Students will work in groups of 2 or 3 and find a real world example of a sinusoidal relationship and create a movie. In the movie students should record the event, show how you found accurate measurements (Period, Amplitude, Sinusoidal axis, why you chose the function of Sine or Cosine) sketch the graph, and write the equation. A storyline to go with the video is encouraged but not required. It is important that you *HAVE FUN* with this project and let the *CREATIVE* juices flow! Finally submit you video through google drive.

**Useful Resources:** [iMovie](#) & [Desmos.com](#) (to create, save, and upload graphs and equations)

### EXTRA CREDIT GRADING

110	<b>Wow!!</b> You went above and beyond the expectations of this project. Your creativity and the entertainment of the movie is impressive. You have also totally mastered the skill. You have demonstrated full understanding of the concepts involved, have clearly shown all steps of your reasoning, have used notation correctly, and have no mathematical errors.
100	You have totally mastered the skill. You have demonstrated full understanding of the concepts involved, have clearly shown all steps of your reasoning, have used notation correctly, and have no mathematical errors.
90	You have a firm grasp of the skill. You have demonstrated a full or almost full understanding of the concepts involved, but you possibly didn't show steps of your reasoning, did not use notation consistently, and/or made a small (but non-fatal) mathematical error.
80	You have demonstrated some conceptual understanding of the skill. You possibly have some confused reasoning, did not completely answer the question, did not use consistent notation, and/or made more than one (non-fatal) mathematical error
70	You have demonstrated a weak conceptual understanding. You possibly have confused reasoning, and/or made one or more serious (fatal) mathematical error.
60	You have demonstrated no conceptual understanding. You have confused reasoning and your work demonstrates no understanding of the concepts involved.
0	You did not attempt the project.