Sound versus Light Smack-down

* You are a science expert who has been contracted to travel to an established human colony in a distant solar system. Upon your arrival, you learn that there has been a catastrophic loss of technology and they are now in a more primitive society. Your task is to re-develop an educated, scientific society for this colony. You are responsible for creating an organized and entertaining way to convey the major ideas in wave energy - your area of expertise. As you convey your information to this colony, keep the following facts in mind: the inhabitants of this colony enjoy being entertained, they have short attention spans, their current educational level is very basic, and they do not have access to technology.
* You will create a graphic organizer of your choosing (foldable, mini poster, Venn diagram) which conveys the following information for **each** type of wave:
  + Type of wave with an example of the wave in action. S8P4a
  + This wave travels best in…S8P4a
  + Picture of this wave with all parts accurately labeled. S8P4f
  + What is the range of human perception of the wave? S8P4f
  + How do humans perceive changes in frequency of each wave? S8P4f
  + How do humans perceive changes in amplitude of each wave?S8P4f
  + Down the hall, a fire alarm sounded that had strobe lights on it. Why can the students in the classrooms hear the fire alarm but can’t see the light?
  + There was an increased frequency in the sound wave produced by the bell. Describe how this change will impact how we hear the bell as it travels throughout the building?
  + Explain the Doppler Effect and provide a real-life example.
* The graphic organizer should be called "Sound vs. Light Smackdown" to engage the inhabitants of the colony. The graphic organizer should be neat and colorful so it is appealing to the colony.