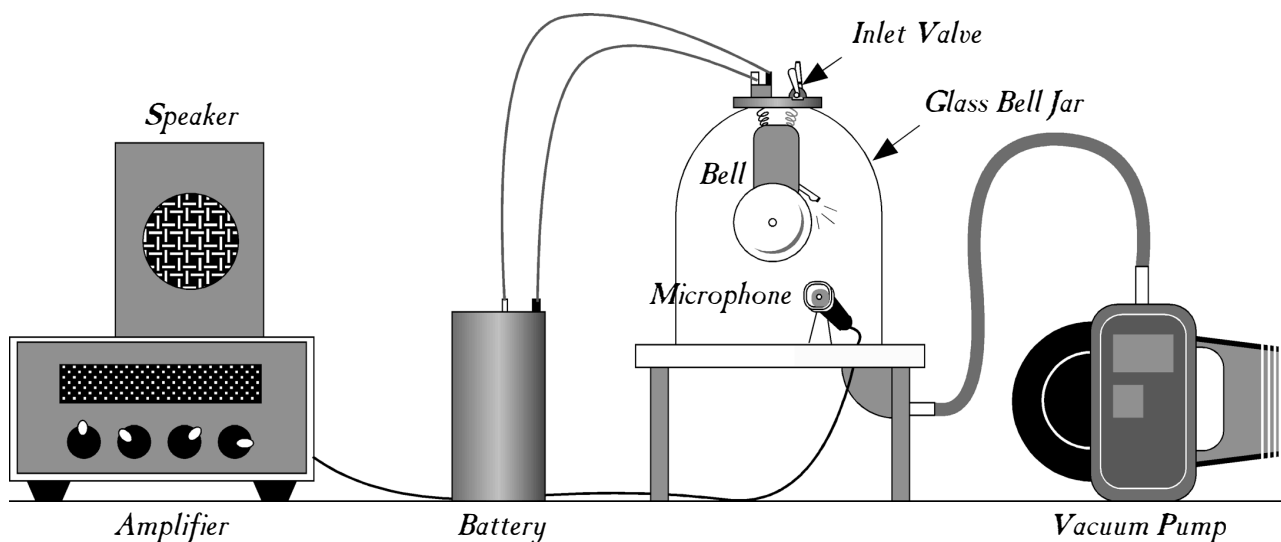


# BELL JAR

## A VIDEO DEMONSTRATION OF SOUND IN A VACUUM

### Physics Cinema Classics: Sound

Name: \_\_\_\_\_ Per: \_\_\_\_\_ Date: \_\_\_\_\_



In 1979, Ridley Scott's space-horror film, *Alien*, shocked audiences throughout the country and around the world. (The graphic alien birth scene was particularly hard to "stomach.") The slogan used to promote the film warned potential viewers that

**IN SPACE, NO ONE CAN HEAR YOU SCREAM.**

1. How can the apparatus shown above be used to test that assertion? What is the purpose of each item?

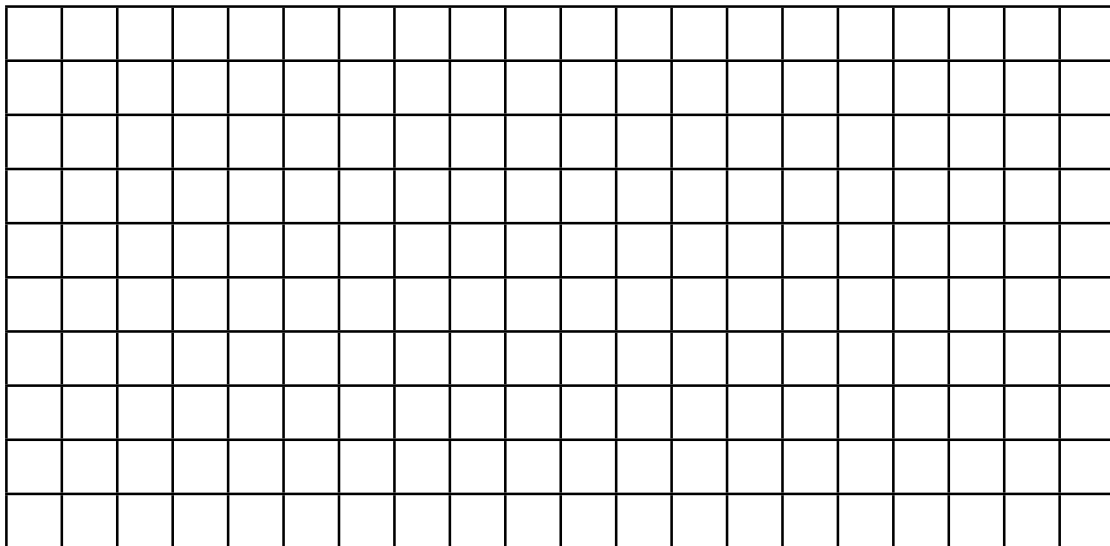
2. Air is invisible. How do the experimenters solve this problem?

3. Describe what happens when the experiment is conducted.

a. What happens in the first part of the experiment?

b. What happens in the second part of the experiment?

4. Plot a graph that is appropriate to tell the story. Label the axes, etc.!



5. What conclusion can be drawn about the slogan for Alien based on what we observed here?

A. The slogan is an accurate description of sounds in space.

B. The slogan is a misrepresentation of sounds in space.

6. Do space movies such as Star Wars and \_\_\_\_\_ and television

programs such as Star Trek and \_\_\_\_\_ respect this principle?