

SCIENCE EXPERIMENT

Question: Can we see how the ear works?

My Guess: (What I think will happen?):

Materials: clear wrap, rice grains uncooked (10-40), a pot, metal pot lid, wood spoon (or some other way to make loud sounds).

What I do: (Procedure): Make a model of the eardrum.

1. Stretch a piece of plastic wrap over a bowl or metal pot. Be sure the wrap is tight. The plastic wrap represents the eardrum.
2. Place 10-40 uncooked rice grains on top of the tight plastic wrap. Be sure not to dent or pierce the wrap
3. Create sound waves. Make noise! Hold the metal lid (drum or even a metal cookie sheet will work) beside the rice on the plastic wrap. Hit the object to make a "sound wave" or a "loud noise" and observe. What happens?

**What Happened?
BEFORE PICTURE**

**What Happened?
AFTER PICTURE**

Why did it happen? (Conclusion) The rice grains jump on the tight clear wrap. This is because the sound waves travel. This is just like the sound waves that travel in our ears and through our ear drum. The noise makes the eardrum vibrate, and it sends messages to your brain about the sounds you're hearing. The brain then knows what the sound is because of your experience. Some sounds are strange and you don't know what makes them. Once you learn what makes that sound it won't be a strange sound to you again. Your brain remembers.