

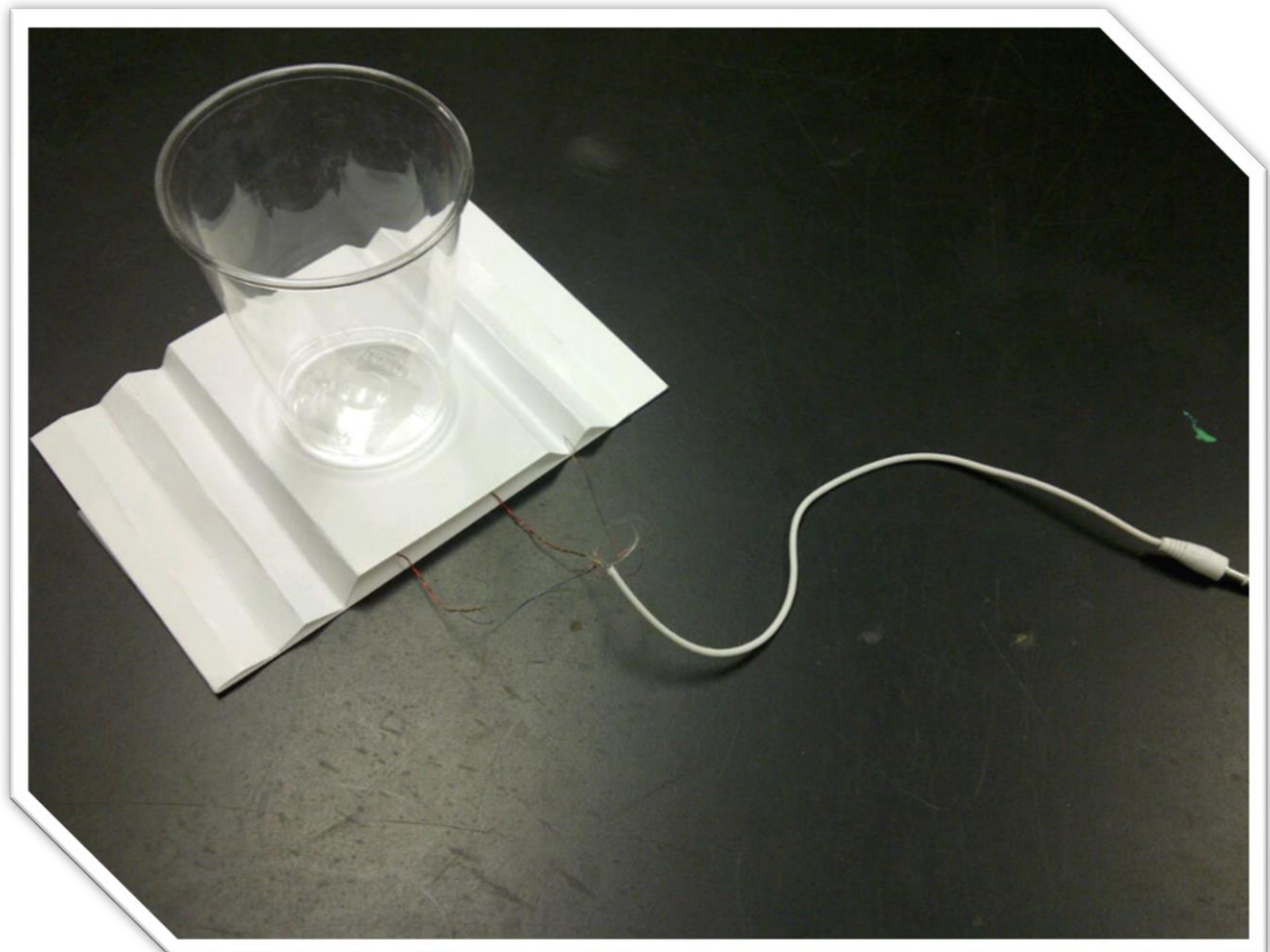
Making Speakers Investigation

Name: _____ Date: _____

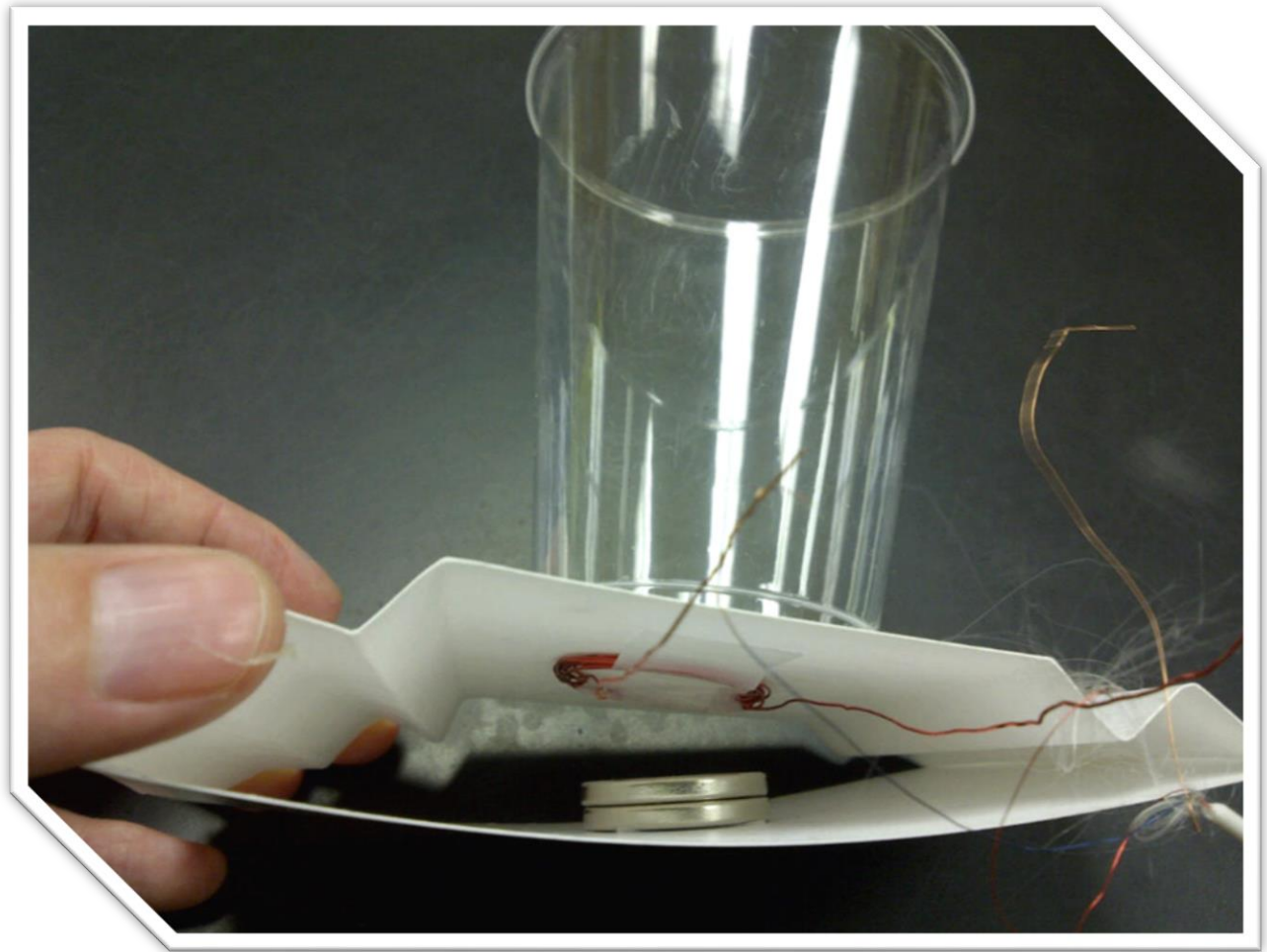
In this design task/investigation you will build a very simple speaker that you will use to play music or audio from a source such as an iPod, or something similar. This will require a knowledge of the basic principles of electromagnetism.

Materials:

- 2 large index cards
- 1 set of earphones (it will be cut so get a cheap one)
- One plastic cup or other amplification device (research this)
- 1 metre of insulated magnet wire
- 2 rare-earth 1" magnets
- Tape or glue



In the diagram above you will see a basic design. The image below shows a basic strategy for the magnet and coiled wire assembly.



Procedure:

- You will be writing/describing the procedure as part of the report/video.

Report/Video - Evaluation:

Explain the basic principle behind how a speaker works. You can do this using images, diagrams in a written report or make a short video explaining the key physics principles and how it was made including a demonstration of your speaker. Be sure to include discussions about Oersted's principle, etc.