

Percy Placemat Science

Supplies

- Paper for Drawing
- Drawing Utensils (pencils, colored pencils, markers)
- Glue and/or Tape
- Laminator (optional)
- Computer/Laptop (optional)
- Printer (optional)

Instructions

1. Have students draw or design a placemat by drawing or designing a picture using the colored pencils or markers or by designing a graphic on the computer. Pictures can be of a scene from one of the Percy Jackson books, or a design that could have been used at Camp Half Blood - door signs, team flags, family crests, etc.
2. If using the computer, have students print pictures.
3. Have the students create multiple placemats.
4. Layer some of the placemats by gluing or taping layers of paper together.
5. If you have the option of a laminator, have the students laminate one of the pictures.
6. Hypothesize which placemat will be the strongest.
7. Test the placemats to see which design is stronger. Kids can try to tear the placemats with their hands, and they can test them by dropping food or splattering water on them.
8. Have students answer the questions:
 - a. Is the two ply stronger than one ply paper?
 - b. Is the laminated design the strongest?

Further reading.

Layering is used for adding strength to a wide variety of products from bridges to robotics in the medical field. Here are some websites for further reading, resources, and projects.

<https://phys.org/news/2015-09-layering-technique-graphene-fiber-strength.html>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5512530/>

<https://www.aboriginalaccess.ca/sites/aboriginalaccess.ca/files/GRADETHREEunitPLANFINAL5.pdf>

<https://www.scientistsinschool.ca/wp-content/uploads/2017/05/STR3-TeacherResourcePackage-2017-18.pdf>