

Find Your Materials Match

Summary: This materials-themed ice breaker activity is great for the first day of a camp program to get students thinking about basic material properties, as well as talking to each other and speaking out loud in front of the group.

Target age group: High school

Time: 15-20 minutes

Materials:

- Printed list of words [below, edit to suit]
- Scissors
- Tape

Activity: Print out the list of materials below and cut the sheet into slips, with one word per slip. Be sure to have two of each material and the same number of slips as students (if you have an odd number of students, you or a helper can play too!). Go around the room and tape one slip of paper to the back of each student's shirt. Instruct the students that they need to figure out which material they are, and then find the other person with the same material. In order to determine their own material, they are limited to asking yes-or-no questions, and they can only ask each person two questions before moving on to someone else. It can be helpful to prep them with some example questions, such as:

- Am I a metal? polymer? ceramic?
- Am I silver? yellowish? white? transparent?
- Am I bendable? brittle? easy to break?
- Am I found in a kitchen? bathroom? car? computer?

After the students have found their partners, give them a few minutes to get to know each other. Tell them that at the end of five minutes, they will need to introduce their partner to the group by telling everyone that person's name, where they're from, and something interesting about them. After the time is up, have the students stand in a circle and go around the room, with each pair introducing themselves to the group. Before each introduction, ask the pair what their material was, and what property of the material makes it particularly useful or valuable.

Source: Amber Genau, Univ. of Alabama at Birmingham (2020) <https://nanohub.org/resources/33797>

Diamond

Silicon

Steel

Diamond

Concrete

Steel

Bronze

Concrete

Glass

Bronze

Styrofoam

Glass

Rubber

Styrofoam

Gold

Rubber

Porcelain

Gold

Porcelain

Aluminum

Silicon

Carbon

Carbon

Iron

Iron

Cement

Cement

Copper

Copper

Lead

Lead

Aluminum

Spandex

Spandex

Polyester

Polyester

