List-Group-Label

Summary

Students will generate a list of properties of matter and then group them by similarities. The teacher will guide the discussion to eventually label all properties as either physical or chemical.

Time Frame

1 class periods of 30 minutes each

Group Size

Small Groups

Materials

overhead OR

- index cards

10-12 per group) (template attached)

Instructional Procedures

Ask students to think about all the characteristics we use to describe matter. You can write their responses on the board or overhead or you can have students write the properties on index cards (one per card). You can skip this step and use the list found below.

Once a list of properties has been generated, ask students to group them. Discuss what characteristics might be used to create groups. Do not label the groups yet.

Give students an opportunity to categorize each of the properties that was listed. If they have index cards, they can work in a group and move the cards around.

Clarify the characteristics of each group and give students the definition (or have them look it up in their books)

physical properties: properties of the substance that can be observed or measured without changing the identity of the matter

chemical properties: a property of matter that describes a substance based on its ability to change into a new substance with different properties.

Ask students to put all the properties into these two groups. Have a group share what they get and discuss with the class whether they are right or wrong. The textbook could also be used to have students check their work.

If a written assignment is desired, have students write definitions for each property and list the properties based on chemical or physical.

This activity can be adapted to any classification activity. In the 8th grade core chemical and physical changes and rocks and minerals would work well with this format.

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

Utah LessonPlans