

Chemical and Physical Properties Activity Packet

Teachers' Notes:

1. In the weeks leading up to this activity, ask friends, neighbors, colleagues for recycled or used items such as milk cartons, egg cartons, fabric, plastic, aluminum foil, toys, perfume, hair gel, lotions, coffee bags, construction paper, protein powder containers, bleach containers, Styrofoam, cloth, etc.
2. A few days prior to starting the activity, photocopy the student handout.
3. Display the next page in this packet titled Chemical and Physical Properties Large Group Activity (as a Smartboard display).
4. Have a student volunteer to go to the board as a class secretary.
5. Ask the students to pick an item such as a milk carton, fabric, rubber band, oxygen, etc.
6. Ask the students to describe the object (stretchy, soft, doesn't react with our skin, flammable, non-toxic, lightweight, can be cleaned regularly, irritates eyes, etc.) Be sure to include appropriate vocabulary. Some suggestions include: malleable, fragile, dense, lustrous, tough, ductile, soluble in water. As descriptions are mentioned, direct the student at the board to write each description in the appropriate box (chemical or physical). Once the students seem to pick up on the pattern, have the class tell the secretary which box to put it in.
7. Have the students record their own observations in Part A of the Student Handout.
8. Repeat the second and third boxes as in Part A.
9. Follow the handout. When you get to Part D, pull out the old containers that you had collected. Have the students get out of their seat to investigate the objects.
10. You will need the internet for Part E.

Name: _____ Date: _____ Class: _____

Chemical and Physical Properties Large Group Activity
(Smartboard display)

	Item	Physical properties	Chemical properties
1			

Name: _____ Date: _____ Class: _____

Chemical and Physical Properties Large Group Activity
(Smartboard display)

	Item	Physical properties	Chemical properties
2			

Name: _____ Date: _____ Class: _____

Chemical and Physical Properties Large Group Activity
(Smartboard display)

	Item	Physical properties	Chemical properties
3			

Chemical and Physical Properties—Student Handout

Part A: Large Group Data Chart. Complete the chart below as instructed

	Item	Physical properties	Chemical properties
1			
2			
3			

Part B. Vocabulary Review. List the words above that are new to you. Discuss and record definitions as a class/small group.

1. _____ - _____

2. _____ - _____

3. _____ - _____

Part C. Individual Definition. When instructed, **SILENTLY** study the chart in Part A. Write a definition for the terms below. When EVERYONE has a definition written, we will move on.

1. Physical property – _____

2. Chemical property - _____

Name: _____ Date: _____ Class: _____

Part D. Group Definition. When instructed, discuss your definition with your assigned group members. Come up with a group definition for the terms below. In your definition below, underline anything that you and someone else had that was the same and circle any ideas/thoughts that you did not have on your paper (from your above definitions).

1. Physical property – _____

2. Chemical property - _____

Part E. Individual Data Chart: Evaluate the items provided. Complete the chart.

	Item	(Two) Physical properties	(Two) Chemical properties
1			
2			

Part F. Elements and Their Properties. Choose 2 elements from the Periodic Table. Complete the chart. Use the internet if necessary.

	Element	Two Physical Properties	Two Chemical Properties
1			
2			

Name: _____ Date: _____ Class: _____

Part G. Who cares about chemical and physical properties?

1. Name a substance not yet mentioned and one of its *physical* properties.

2. Explain how property influences the way we use the substance.

3. Name a substance not yet mentioned and one of its *chemical* properties.

4. Explain how the property influences the way we use the substance.

5. Who cares about chemical and physical properties? Why?
