



Science Virtual Learning

6th Grade Science:

Physical Properties and Changes

May 14, 2020



6th Grade Science

Lesson: May 14, 2020

Objectives/Learning Targets:

Students will identify physical properties and changes.

Warm Up

On a separate sheet of paper, explain when you might need to use physical properties to describe (or work) with something.



Watch the [video](#) to help add to your thinking.

Warm Up

On a separate sheet of paper, explain when you might need to use physical properties to describe (or work) with something.

Possible answers: you can use physical properties to describe how someone looks (height, hair, eye and skin color).

Watch the [video](#) to help add to your thinking.



Background Information

Physical Property:

A property of a substance that can be observed or measured without changing the chemical identity of the substance.

Physical Properties of Matter

- State
- Taste
- Odor
- Color
- Luster
- Clarity
- Hardness
- Solubility
- Viscosity
- Crystal form
- Magnetism
- Texture
- Malleability
- Ductility
- Density
- Electrical conductivity
- Melting point
- Boiling point



Background Information

Physical change

1. A change in size, shape or state
2. No new substance is formed

One way to identify a physical change is that such a change may be reversible, especially a phase change. For example, if you freeze water into an ice cube, you can melt it into the water again.

Ask yourself: *Is the change reversible?*

Not all physical changes are easy to reverse though.





Practice

Suppose you are given 2 mysterious pieces of metal. Among other properties, you are able to measure height, density, volume, mass, color, electrical conductivity, and melting point for each substance.

From these measurements, you suspect that the 2 metals are the same. Which of these physical properties must be the same if you are looking at the same metals?

Determine the correct placement for the following properties:

Height, Density, Volume, Mass Color, Electrical Conductivity, Melting Point

Would be the same:	Might not be the same:
1.	1.
2.	2.
3.	3.
4.	



Practice - Answer Key

Suppose you are given 2 mysterious pieces of metal. Among other properties, you are able to measure height, density, volume, mass, color, electrical conductivity, and melting point for each substance.

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Determine the correct placement for the following properties:

Height, Density, Volume, Mass Color, Electrical Conductivity, Melting Point

Would be the same:	Might not be the same:
<ol style="list-style-type: none">1. Density2. Color3. Electrical conductivity4. Melting point	<ol style="list-style-type: none">1. Height2. Volume3. Mass

Practice

Create a one-pager over physical properties and changes. Fold your paper in half so that you'll have the other half for tomorrow's lesson. Use the directions below to create your one-pager.



1. Make sure your one-pager has a TITLE.
2. Include **four** pictures to represent physical properties and changes.
3. Include **five** vocabulary words expressing physical properties and changes.
4. Include **two** questions that you are still wondering about physical properties and changes.
5. Connect your one-pager to your life by drawing **something in your home that you can describe its physical properties!**

Practice - Answer Key

Here's an example!

Physical Properties

How do mountains get their ridges?

color

odor

Vocab:
observed
measured
texture

Home example:
my walls are purple!

Physical Changes

ice

boiling water

Vocab:
size
shape

Would a vase be easy to put back together if broken?



Additional Practice

1. Complete the [worksheet](#) on identifying physical properties and changes.
2. Find your favorite quarantine activity. How many physical properties can you use to describe it? Use the background information on slide 4 to help!

Example: Book - smooth, solid, hard, blue & white, shiny, dense, etc.

3. Review physical properties in this [Gimkit](#).