

WHAT IS MATTER?

The background of the slide features a collection of laboratory glassware. In the center is a large Erlenmeyer flask containing a red liquid. To its left is a smaller flask with yellow liquid, and further left is a round-bottom flask with red liquid. To the right of the central flask is a beaker containing a green liquid with a stir bar. In the foreground, there are several smaller flasks containing yellow and red liquids. The background is a soft-focus laboratory setting with a white surface and a grey wall.

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MATTER VS NOT MATTER

- Which of the following are matter? Which are not?

Matter	Not Matter
TREE	sound
AIR	light
house	MELODY
cat	heat
COOKIE	LOVE
baseball	LUSTER

COOKIE

TREE

light

house

cat

baseball

MELODY

- How are the items in the *Matter* column different from the items in the *Not Matter* column?

PROPERTIES OF MATTER

- Matter is anything that has **mass** and **takes up space** (but matter also has other properties).
- Matter's other properties:
 - Inertia – the tendency of matter to maintain its state of motion.
 - Composition - matter is composed of elements, compounds, and mixtures.



SOME DEFINITIONS

- Element = simple substance that cannot be broken down by chemical means
- Compound = substance composed of two or more elements chemically combined
- Mixture = two or more substances, mingled, but NOT chemically combined
- Solution = homogeneous mixture
 - Homogeneous – uniform composition
- Mechanical mixture = heterogeneous mixture
 - Heterogeneous – lacking uniform composition

COMPOSITION OF MATTER

