## Chemical Changes Study Guide

## 6.MS-PS1-6. Plan and conduct an experiment involving exothermic and endothermic chemical reactions to measure and describe the release or absorption of thermal energy.

## What to study:

a. Understands the definition of a physical change
b. Understands the definition of a chemical change
c. Can identify a change as physical or chemical
d. Understands the difference between endothermic \& exothermic reactions
e. Can provide evidence to support a claim that an endothermic or exothermic reaction has occurred

Study Resources:
$\square$ Physical vs. Chemical change reading (in Notability)
$\square$ Physical vs. Chemical Nearpod (code: YUVOQ) on website
$\square$ Explain Everything with phys. vs. chem. practice examples \& chalk mini-lab
$\square$ Evidence of Chemical Reactions video \& Lab sheet - in Notability
$\square$ Endo. vs. Exo. reactions Reading (in Notability)
$\square$ Endo vs. Exo Video - Link 46A on website
$\square$ Endo Exo Video sheet - in notability
$\square$ Endo/ Exo Explain Everything
$\square$ Endo/Exo lab in Notability
Strategies:

- Extra help:

Tuesday
$\square$ Wednesday

- Study with a friend
$\square$ Teach friend/family member topic we are studying
$\square$ Make a song/rhyme/rap to help you remember chem vs phys. changes \& exo. vs. endo. changes
Make a chart of physical \& chemical changes
Make a quizlet about Endothermic \& Exothermic
$\square$ Make a video of your own to study these concepts!
6.MS-PS1-7(MA). Use a particulate model of matter to explain that density is the amount of matter (mass) in a given volume. Apply proportional reasoning to describe, calculate, and compare relative densities of different materials.

What to study:
a. Understands and measures volume of liquids and solids

- Can explain what volume measures
- Knows and can explain the process/formula of finding volume of:
- Rectangular solids
- Irregular solids
- Liquids
- Knows the tools and units used for volume of:
- Rectangular solids
- Irregular solids
- Liquids
- Can explain the relationship between $\mathrm{cm}^{3}$ and mL
b. Understands and measures mass of liquids and solids
- Can explain what mass measures
- Knows and can explain the process of finding mass
- Knows the tools and units used for mass
c. Uses formula to calculate various densities
- Knows the formula used to calculate density
- Knows the unit used for density of a solid or liquid


## Study Resources/Strategies:

Volume:
$\square$ RECTANGULAR OBJECTS VIDEO on website

- MASS, WEIGHT \& VOLUME REVIEW VIDEO on website
$\square$ Review volume notes on Notability
Review Volume Reading \& Reading Questions
$\square$ Practice finding volume of:
$\square$ Rectangular objects around your
$\square$ Review Rectangular Objects practice sheet on website
$\square$ Review Reading Liquids practice sheet on website
$\square$ Review 3 Volume labs
- Liquids lab
$\square$ Rectangular Objects lab (includes irregular objects lab as well)
Density:
$\square$ Review density notes (in binder or notability - whichever you chose)
$\square$ Review density notes presentation
Watch density videos on website(more added daily)
- Archimedes

| d. Can draw \& explain a diagram illustrating density <br> - Knows the Density of water <br> - Understands why something floats or sinks in water <br> - Can compare the density of objects with the same mass but different volumes <br> - Can compare the density of objects with the same volume but different masses <br> - Can explain what happens when substances of different densities are combined (liquids and solids together) | $\square$ Population Density <br> - Mr. Edmonds Density Song <br> $\square$ Review density reading and density reading worksheet on website <br> $\square$ Review density labs <br> $\square$ Review Density Explain Everything <br> Study strategies for any topic: <br> $\square$ Make a song/rap/rhyme/acronym <br> - Study with a friend/quiz each other <br> Make a Kahoot and play with friends/family <br> $\square$ Create a Explain Everything or other type of presentation to include all info. from study guide or what you need most help with Other ideas (yours, friends or your teacher): |
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