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:

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

Strategies:

- □ Extra help:
 - Tuesday
 - \square Wednesday
- \square Study with a friend
- Teach friend/family member topic we are studying
- 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
- 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.

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 cm³ 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 densityKnows the unit used for density of a solid or liquid

Study Resources/Strategies: Volume:

- RECTANGULAR OBJECTS VIDEO on website
- □ MASS, WEIGHT & VOLUME REVIEW VIDEO on website
- □ *Review volume notes on Notability*
- Review Volume Reading & Reading Questions
- *Practice finding volume of:*
 - Rectangular objects around your house
- Review Rectangular Objects practice sheet on website
- Review Reading Liquids practice sheet on website
- □ Review 3 Volume labs
 - Liquids lab
 - □ Rectangular Objects lab (includes
 - irregular objects lab as well)

Density:

- Review density notes (in binder or notability - whichever you chose)
- □ *Review density notes presentation*
- Watch density videos on website(more added daily)
 - ☐ Archimedes

 d. Can draw & explain a diagram illustrating density Knows the Density of water Understands why something floats or sinks in water Can compare the density of objects with the same mass but different volumes Can compare the density of objects with the same volume but different masses Can explain what happens when substances of different densities are combined (liquids and solids together) 	 Population Density Mr. Edmonds Density Song Review density reading and density reading worksheet on website Review density labs Review Density Explain Everything Study strategies for any topic: Make a song/rap/rhyme/acronym Study with a friend/quiz each other Make a Kahoot and play with friends/family 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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