Lesson Plan 2/19-2/23

February 19 - 23, 2018

MON. FEB. 19TH	TUE. FEB. 20TH	WED. FEB. 21ST	THU. FEB. 22ND	FRI. FEB. 23RD
7th Grade Science **No School**	7th Grade Science **Explain Phenomena** **Standards** **MS-PS1-2** Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred. **MS-PS1-5** Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved. **Objective** 1. Students will identify information that a chemical equation contains 2. Students will apply scientific principles to explain how mass is conserved during a chemical reaction 3. Students will use mathematical representations to identify three categories of chemical equations **Critical Questions** 1. Students will be able to describe how mass is conserved during a chemical reaction? 2. What information does a chemical equation contain? 3. What are three types of chemical reactions **Bellringer** Data Interpretation Graph **Engagement** • Popcorn reading 98-99; 102-103 • Balance chemical equations worksheet 5--Chemical Reactions Worksheet.pdf **Assessment** Kahoot assessment	7th Grade Science **Balancing Chemical Equations Part I** **Standards** **MS-PS1-2** Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred. **MS-PS1-5** Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved. **Objective** Students will be able to mathematically represent law of conservation of mass through balancing chemical equations **Critical Questions** 1. How can the number of atoms each each substance involved in a chemical reaction be changed? 2. Why must an equation be balanced? 3. What happens to chemical bonds during a chemical reaction? **Bellringer** 1. Pre-assessment activity 2. Video on chemical reactions https://youtu.be/zmdxMlb88Fs; students fill in pre-filled notes **Engage** 1. teacher led demonstration of balancing chemical equations 2. students individually balance chemical equations on their worksheet Balancing Equations Part I.pdf **Assessment** Groups show steps to balancing chemical equations on whiteboard in front of class	7th Grade Science **Balancing Chemical Equations Part II (continuation)** **Standards** **MS-PS1-2** Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred. **MS-PS1-5** Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved. **Objective** Students will be able to mathematically represent law of conservation of mass through balancing chemical equations **Critical Questions** 1. How can the number of atoms each each substance involved in a chemical reaction be changed? 2. Why must an equation be balanced? 3. What happens to chemical bonds during a chemical reaction? **Bellringer** Data Interpretation Graph **Engage** Is it Balanced?" Activity Game where students get in lab groups and balance equations with chemical cards Is it Balanced?.pdf **Assessment** Questions on Socrative **Homework** read the following document **Accommodations & Modifications**	7th Grade Science **Controlling Chemical Reactions** **Standards** **MS-PS1-2** Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred. **MS-PS1-5** Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved. **Objective** 1. Students will be able to explain how activation energy is related to chemical reactions 2. Students will identify factors that affect the rate of a chemical reaction **Critical Questions** 1. How do chemical reactions get started? 2. What factors affect the rate of a chemical reaction? **Bellringer** Data Interpretation Graph **Engagement** • Students will get in lab groups and read presentation for controlling chemical reactions; write down 3 questions about the material you read. I will put the best questions on a test. ControllingChemicalReactions.ppt **Assessment** Balance chemical equation on whiteboard **Homework** Study for Monday's exam **Accommodations & Modifications**

Homework
Finish chemical equation worksheet

Accommodations & Modifications

Homework
2nd worksheet for balancing chemical equations
Balancing Equations Part II.pdf

Accommodations & Modifications