Lesson Plan 1/29-2/2

Jan. 29 - Feb. 2, 2018

MON. JAN. 29TH

7th Grade Science

Atoms and Bonding Lab

Standards

MS-PS1 Matter and Its Interactions
MS-PS1-1 Develop models to describe the atomic composition of simple molecules and extended structures.

Objective

Students will be able to understand and demonstrate atomic bonding through gummy bear lab

Critical Questions

1. How is a compound different from a molecule?
2. Are all molecules, compounds?

Engage

Students get in groups, answer preliminary questions, and building atomic bonds with toothpicks and gummy bears
Gummy Bear Lab Ionic & Covalent Bonding.pdf

Assessment

Per lab rubric
Lab Performance Rubric.pdf

Homework

Complete Post Lab Questions
Post Lab Questions.pdf

Accommodations & Modifications

TUE. JAN. 30TH

7th Grade Science

Elaborate Phenomena Part I

Standards

MS-PS1 Matter and Its Interactions
MS-PS1-1 Develop models to describe the atomic composition of simple molecules and extended structures.

Objective

Students will be able to elaborate on the principles of atomic bonding through writing assignment

Critical Questions

What are the intermolecular forces on an atom?

Bellringer

Data Interpretation Graph

Engage

Students participate in writing assignment; must use all three prompts to write 3 different stories
Writing Assingment.pdf

Assessment

Per rubric
Writing Rubric.pdf

Accommodations & Modifications

WED. JAN. 31ST

7th Grade Science

Elaborate Phenomena Part II

Standards

MS-PS1 Matter and Its Interactions
MS-PS1-1 Develop models to describe the atomic composition of simple molecules and extended structures.

Objective

Students will be able to elaborate on the principles of atomic bonding through writing assignment

Critical Questions

What are the intermolecular forces on an atom?

Bellringer

Watch video on ionic and covalent bond
https://youtu.be/_M9khs87xQ8

Engage

Students participate in writing assignment; must use all three prompts to write 3 different stories
Writing Assingment.pdf

Assessment

Per rubric
Writing Rubric.pdf

Accommodations & Modifications

THU. FEB. 1ST

7th Grade Science

Atomic Bonding Exam

Standards

MS-PS1 Matter and Its Interactions
MS-PS1-1 Develop models to describe the atomic composition of simple molecules and extended structures.

Objective

Students will be able to demonstrate knowledge of atoms and bonding through exam.

Critical Questions

1. What determines an element's chemistry?
1. What are the intermolecular forces on an atom?

Bellringer

Study for exam

Engage

Exam

Assessment

Exam is assessment

Accommodations & Modifications

FRI. FEB. 2ND

7th Grade Science

Chemical Reaction: Why does food spoil faster at higher temperatures?

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 explore ideas of chemical reactions with first day phenomenon exploration

Critical Questions

1. How can you identify a chemical reaction?
2. How can you describe changes in matter?

Bellringer

Chemical Reactions Video

Engage

Students get in new lab groups and answer the following questions:
1. Are there chemical reactions with rotten meat? if so, what is reacting?
2. How does the temperature affect the speed of the meat going bad?
3. Why do we keep foods in a refrigerator/freezer?
4. Why do some foods spoil faster than others? Can you provide an example?
5. How does oxidation affect the rate of food being spoiled?
6. What are some common indicators that the food has gone bad?
7. Once the food has changed through the process of being spoiled, can it revert back to its original form? Can you think of other chemical reactions where the item can be returned to its original form?

Assessment

Question on Kahoot

Accommodations & Modifications

Notes

http://www.middleschoolchemistry.com/lessonplans/chapter6/lesson1