Class Standards for H.S. Chemistry- Next Generation Science Standards.

[HS-PS1-1 Matter and its Interactions](http://www.nextgenscience.org/pe/hs-ps1-1-matter-and-its-interactions)

Use the periodic table as a model to predict the relative properties of elements based on the patterns of electrons in the outermost energy level of atoms.

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[HS-PS1-2 Matter and its Interactions](http://www.nextgenscience.org/pe/hs-ps1-2-matter-and-its-interactions)

Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties.

[HS-PS1-3 Matter and its Interactions](http://www.nextgenscience.org/pe/hs-ps1-3-matter-and-its-interactions)

Plan and conduct an investigation to gather evidence to compare the structure of substances at the bulk scale to infer the strength of electrical forces between particles.

[HS-PS1-4 Matter and its Interactions](http://www.nextgenscience.org/pe/hs-ps1-4-matter-and-its-interactions)

Develop a model to illustrate that the release or absorption of energy from a chemical reaction system depends upon the changes in total bond energy

[HS-PS1-2 Matter and its Interactions](http://www.nextgenscience.org/pe/hs-ps1-2-matter-and-its-interactions)

Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties.

[HS-PS1-4 Matter and its Interactions](http://www.nextgenscience.org/pe/hs-ps1-4-matter-and-its-interactions)

Develop a model to illustrate that the release or absorption of energy from a chemical reaction system depends upon the changes in total bond energy.

[HS-PS1-5 Matter and its Interactions](http://www.nextgenscience.org/pe/hs-ps1-5-matter-and-its-interactions)

Apply scientific principles and evidence to provide an explanation about the effects of changing the temperature or concentration of the reacting particles on the rate at which a reaction occurs.

[HS-PS1-6 Matter and its Interactions](http://www.nextgenscience.org/pe/hs-ps1-6-matter-and-its-interactions)

Refine the design of a chemical system by specifying a change in conditions that would produce increased amounts of products at equilibrium.\*

[HS-PS1-7 Matter and its Interactions](http://www.nextgenscience.org/pe/hs-ps1-7-matter-and-its-interactions)

Use mathematical representations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction.