

- PS 1 Students will 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. ([HS-PS1-1](#))
- PS 2 Students will 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-PS1-3](#))
- PS 3 Students will use mathematical representations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction. ([HS-PS1-7](#))
- PS 4 Students will plan and conduct an investigation to provide evidence that the transfer of thermal energy when two components of different temperature are combined within a closed system results in a more uniform energy distribution among the components in the system (second law of thermodynamics). ([HS-PS3-4](#))
- PS 5 Students will evaluate the validity and reliability of claims in published materials of the effects that different frequencies of electromagnetic radiation have when absorbed by matter. ([HS-PS4-4](#))