

Grade 8 Unit 1 Standards-Based Worksheets

District of Columbia Public Schools – Science

STANDARD

8.5.4. Recognize and describe that energy is a property of many systems and can take the forms of mechanical motion, gravitational energy, the energy of electrostatic and magnetostatic fields, sound, heat, light (electromagnetic field energy).

Concepts:

- energy
- systems
- mechanical motion
- gravitational energy
- energy of electrostatic and magnetostatic fields
- sound
- heat
- light
- electromagnetic field energy

Skills:

- recognize
- describe (forms of energy)

Big Ideas:

- Energy causes change and allows work to be done.
- The universe is a series of energy transformations and exchanges.
- The potential to do something is very different than what actually happens.

Essential Questions:

- How is it possible to hold energy in your hand?
- Why will humans never run out of energy?
- If energy is neither created nor destroyed how is it possible to use up all fossil fuels?
- How have societies in the past used and developed different forms of energy?
- Why is it possible that some other form of energy has not been discovered yet?