



# 5-Structure and Properties of Matter

## Standards

5-PS1-1, 5-PS1-2, 5-PS1-3, 5-PS1-4

## Resources

Mystery Science

## Competencies

- Explore how any type of matter can be divided into small particles too small to be seen, but still exist and how measurements of properties can be used to identify materials, even when mixed or changed.

## I can

- **I can** prove that matter is made up of particles too small to be seen.
- **I can** prove that the weight of matter stays the same, even when I mix it, heat it, or cool it.
- **I can** identify matter based on its properties.
- **I can** determine whether mixing substances gives me a new substance.

## Vocab

**Content:** matter, particles, weight, properties, substance

**Academic:** identify, prove



# 5-Matter and Energy in Organisms and Ecosystems

## Standards

5-PS3-1, 5-LS1-1, 5-LS2-1

## Resources

Mystery Science

## Competencies

- Explore how any type of matter can be divided into small particles too small to be seen, but still exist and how measurements of properties can be used to identify materials, even when mixed or changed.

## I can

- **I can** prove that all food energy was once energy from the sun.
- **I can** prove that plants get the materials they need mostly from air and water.
- **I can** describe the movement of matter between plants, animals, decomposers, and the environment.

## Vocab

**Content:** energy, matter, decomposers

**Academic:** prove, describe



# 5-Earth's Systems

## Standards

5-ESS2-1, 5-ESS2-2, 5-ESS3-1

## Resources

Mystery Science

## Competencies

### I can

- **I can** create a model to describe the interactions amongst the geosphere, biosphere, hydrosphere, and atmosphere.
- **I can** describe and graph the amounts of water (fresh and salt) to show how water distributes around the world.
- **I can** gather information about ways in which communities around the world protect the Earth.

### Vocab

**Content:** geosphere, biosphere, hydrosphere, atmosphere

**Academic:** model, distribute, protect



# 5-Space Systems: Stars & the Solar System

## Standards

5-PS2-1, 5-ESS1-1, 5-ESS1-2

## Resources

Mystery Science

## Competencies

- Explore how forces act on objects with strength and direction and can be measured. A successful student can explore how electric and magnetic forces affect objects within contact or not in contact at all, and how the gravitational force of the Earth pulls objects.

## I can

- **I can** support the argument that gravity forces objects down.
- **I can** support the argument that a stars brightness is determined by the distance it is from Earth.
- **I can** use a graph to show daily changes of of shadows throughout the day and night.
- **I can** use a graph to show seasonal changes in the appearance of stars.

## Vocab

**Content:** gravity, force, shadow, seasonal change

**Academic:** argument, appearance