

Exploring Heat

Content Area: **Science**
Course(s):
Time Period: **Undefined**
Length: **All Year**
Status: **Published**

Unit Overview

Essential Questions

What is heat?

What happens when objects are heated?

How can I be safe with hot things?

Content

Heat

Skills

Observing

Predicting

Describing

Comparing

Sorting

Vocabulary

Matching

Creating

Assessments

Teacher observation and question

Student response

Lessons/Learning Scenarios

1. using body temperature to melt ice cube
2. melting candy in mouth
3. compare feeling the heat of the sun and the cool of the shade
4. watching pancake batter cook on electric skillet
5. safety: stove, grill, iron, etc.
6. observe ice cube melting over time
7. melting crayon bits into one rainbow crayon

Standards

SCI.PK.5.1.1	Display curiosity about science objects, materials, activities, and longer-term investigations in progress (e.g., ask who, what, when, where, why, and how questions during sensory explorations, experimentation, and focused inquiry).
SCI.PK.5.1.2	Observe, question, predict, and investigate materials, objects, and phenomena during classroom activities indoors and outdoors and during any longer-term investigations in progress. Seek answers to questions and test predictions using simple experiments or research media (e.g., cracking a nut to look inside; putting a toy car in water to determine whether it sinks).
SCI.PK.5.1.3	Use basic science terms (e.g., observe, predict, experiment) and topic-related science vocabulary (e.g., words related to living things [fur, fins, feathers, beak, bark, trunk, stem]; weather terms [breezy, mild, cloudy, hurricane, shower, temperature]; vocabulary related to simple machines [wheel, pulley, lever, screw, inclined plane]; words for states of matter [solid, liquid]; names of basic tools [hammer, screwdriver, awl, binoculars, stethoscope, magnifier]).
SCI.PK.5.1.4	Communicate with other children and adults to share observations, pursue questions, make predictions, and/or conclusions.
SCI.PK.5.1.5	Represent observations and work through drawing, recording data, and “writing” (e.g., drawing and “writing” on observation clipboards, making rubbings, charting the growth of plants).
SCI.PK.5.2.1	Observe, manipulate, sort, and describe objects and materials (e.g., water, sand, clay, paint, glue, various types of blocks, collections of objects, simple household items that can be taken apart, or objects made of wood, metal, or cloth) in the classroom and outdoor environment based on size, shape, color, texture, and weight.

- SCI.PK.5.2.3 Investigate sound, heat, and light energy through one or more of the senses (e.g., comparing the pitch and volume of sounds made by commercially made and homemade instruments, recording how shadows change during the course of a day or over time, using flashlights or lamp light to make shadows indoors).
- SCI.PK.5.5.1 Identify and use basic tools and technology to extend exploration in conjunction with science investigations (e.g., writing, drawing, and painting utensils, scissors, staplers, magnifiers, balance scales, ramps, pulleys, hammers, screwdrivers, sieves, tubing, binoculars, whisks, measuring cups, appropriate computer software and website information, video and audio recordings, digital cameras, tape recorders).

Resources
