



Exploring Urban Heat Islands - Curriculum Connections

Suggested Grades: 3-6

Curriculum Connections: Living Systems (Gr 3), Earth Systems (Gr 3-6), Energy (Gr 5,6), Matter (Gr 6)

Specific Learning Outcomes:

Grade 3

- *Earth Systems* Students analyze changes in Earth's surface and explain how its layers hold stories of the past (human activities that change Earth's surface).
- *Living Systems* Students analyze and describe how plants and animals interact with each other and within environments (protecting plant and animal life how do urban heat islands impact plants and animals in the city?).

Grade 4

• *Earth Systems* - Students investigate the systems of Earth and reflect on how their interconnections sustain life (impact of sunlight, water, conservation/creating parks).

Grade 5

- Energy Students investigate and analyze various energy resources.
- *Earth Systems* Students investigate and analyze various energy resources (how urban heat islands impact energy usage).

Grade 6

- *Matter* Students investigate how particles of matter behave when heated or cooled and analyze effects on solids, liquids, and gases.
- *Energy* Students investigate energy resources and explain factors that influence their use (environmental impacts, management of energy resources).
- *Earth Systems* Students investigate climate, changes in climate, and the impact of climate change on Earth (reflecting light with, e.g., white paint, can reduce need for electricity and therefore generate fewer greenhouse gases, role of plants in ecosystem).