

LINCOLN PUBLIC SCHOOLS
Science Learning Expectations: Grade 5:

**EARTH & SPACE
SCIENCE**

Weather Water Cycle

Mass Standard

Distinguish among the various forms of precipitation (rain, snow, sleet, and hail) making connections to the weather in a particular place and time.

Describe how global patterns such as the jet stream and water currents influence local weather in measurable terms such as temperature, wind direction, and speed, and precipitation.

Describe how water on earth cycles in different forms and indifferent locations, including underground and in the atmosphere
Give examples of how the cycling of water, both in and out of the atmosphere, has an effect on climate.

Big Ideas

- ❑ Climate and the weather associated with it (precipitation, temperature and wind) have a major influence on all human activities.

Key Outcomes

- ❑ Students will demonstrate an understanding of **global weather patterns and climate change** by describing the water cycle and its influence on weather.

Essential Knowledge and Skills

Students will know:

- ❑ How to use scientific inquiry* to access, explore and explain their understanding of core knowledge
- ❑ The Earth as a system is constantly trying to balance its heat budget by moving cold air from the poles towards the tropics, and warm air from the tropics towards the poles
- ❑ Convection currents transfer heat as warm air rises and air from high pressure (cool) areas to low pressure (warm) areas
- ❑ Global and local winds are caused by the convection currents created due to unequal heating of the earth's surface
- ❑ Heat as warm air rises and air from high pressure (cool) areas to low pressure (warm) areas

*Scientific Inquiry Standards are embedded in each unit of study