

## Lesson I: Cloud Types

### Parent/Guardian Instructions:

- Review the cloud type lesson discussion

### Lesson Discussion:

St. Clair County can experience a variety of types of weather from extreme heat to extreme cold. Review with your child (ren) the types of storms affecting our area and how we can be prepared and be safe prior to, during and after a storm. Before we begin, identify with your child (ren) the four basic cloud categories observed in our atmosphere that have the potential to produce storms:



**Cirro-form**

High-level clouds which form above 20,000 feet (6,000 meters) and are usually composed of ice crystals. High-level clouds are typically thin and white in appearance, but can create an array of colors when the sun is low on the horizon. Cirrus generally occurs in fair weather and point in the direction of air movement at their elevation.



**Nimbo-form**

Nimbus comes from the Latin word meaning "rain". These clouds typically form between 7,000 and 15,000 feet (2,100 to 4,600 meters) and bring steady precipitation. As the clouds thicken and precipitation begins to fall, the bases of the clouds tend to lower toward the ground.



**Cumulo-form**

Clouds look like white fluffy cotton balls or heaps and show the vertical motion or thermal uplift of air taking place in the atmosphere. The level at which condensation and cloud formation begins is indicated by a flat cloud base, and its height will depend upon the humidity of the rising air. The more humid the air, the lower the cloud base. The tops of these clouds can reach over 60,000 feet (18,000 meters).



**Strato-form**

"Stratus" is Latin for layer or blanket. The clouds consist of a feature-less low layer that can cover the entire sky like a blanket, bringing generally gray and dull weather. The cloud bases are usually only a few hundred feet above the ground. Over hills and mountains they can reach ground level when they may be called fog. Also, as fog "lifts" off the ground due to daytime heating, the fog forms a layer of low stratus clouds.

### Parent/Guardian and Child (ren) Activity:

- Complete the Cloud Matching Game