



Welcome to Wondrous Weather! In this class packet you'll learn about what weather is and how it affects our lives! Activities will include nature exploration, crafts, and songs. If you pick up this packet in-person at the LLNF at 110 Eel Point Rd, then all materials will be provided in the packet.

You can also download this packet from our website and follow along with the instructions, even if you are not on Nantucket, but you'll need to provide your own materials.

Activities included:

- Create Your Own Weather Journal
- Cloud Search
- Create Your Own Rainbow
- Water Cycle Song



Create Your Own Weather Journal

Materials:

- Weather Journal sheet
- Colored pencil or other writing implement

Instructions:

What is weather? Weather is a mix of conditions that happen each day in our atmosphere. These conditions are measured on a day-to-day basis, change regularly, and are variable in different locations across the Earth. The most commonly recorded conditions are **Precipitation, Temperature, Wind Speed/Direction, and Overall Pattern.**

Precipitation is any liquid or frozen water that forms in the atmosphere and falls back to the Earth. On Nantucket the most common form of precipitation is rain, but we also may see snow, hail, and sleet.

Temperature is a measure of how hot or cold it is outside. In the USA we generally record this in degrees Fahrenheit.

Wind Speed and Direction is the measure of how fast the air is moving and from which direction the wind is originating.

Overall Pattern refers to a general condition report of what the weather and skies are doing. Some examples include Sunny, Cloudy, Fog, Rain, and Thunderstorms.

Now that you know what weather is and how to record it, your task is to make your own observations of today's weather using the journal provided on the next page.

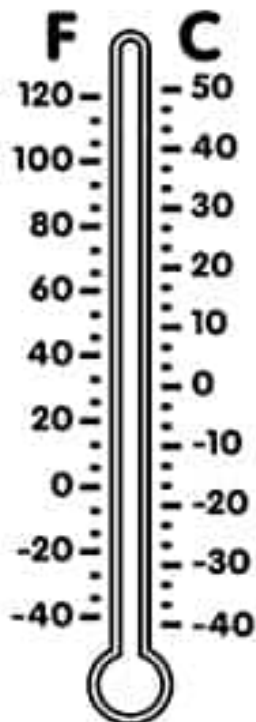




Daily Weather Journal

TODAY IS

SUNDAY	JANUARY	1	11	21
	FEBRUARY	2	12	22
MONDAY	MARCH	3	13	23
	APRIL	4	14	24
TUESDAY	MAY	5	15	25
	JUNE	6	16	26
WEDNESDAY	JULY	7	17	27
	AUGUST	8	18	28
THURSDAY	SEPTEMBER	9	19	29
	OCTOBER	10	20	30
FRIDAY	NOVEMBER			31
	DECEMBER			

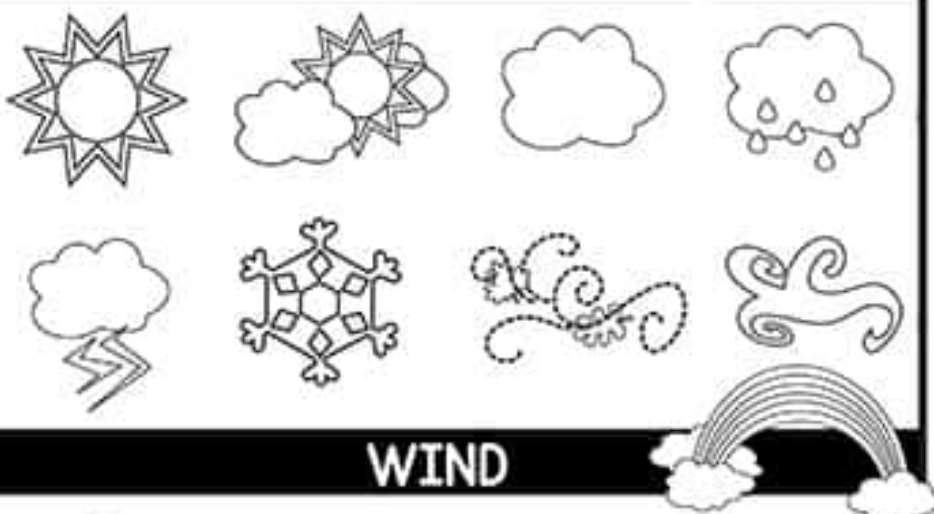
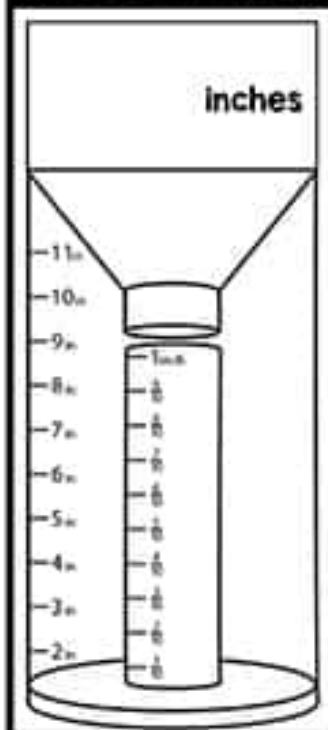


TEMP

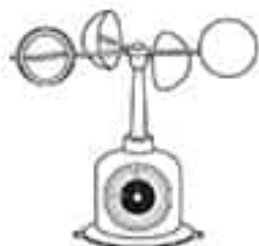


freezing
cold
warm
hot
humid

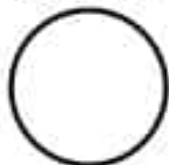
PRECIPITATION



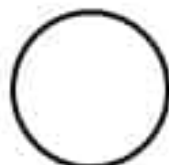
WIND



SPEED:



DIRECTION:



Cloud Search

Materials:

- Types of clouds diagram
- Cloud reporting worksheet
- Colored pencil or other writing implement

Instructions:

It's time to learn about clouds! Clouds are floating masses of water droplets or ice crystals. There are many types of clouds, each of which may signal different weather patterns. When precipitation forms, it drops from clouds to the Earth's surface.

As you follow along, you'll find a diagram showing examples of different types of clouds. You'll also find a worksheet to report your own cloud by drawing a picture of it and attempting to identify it!

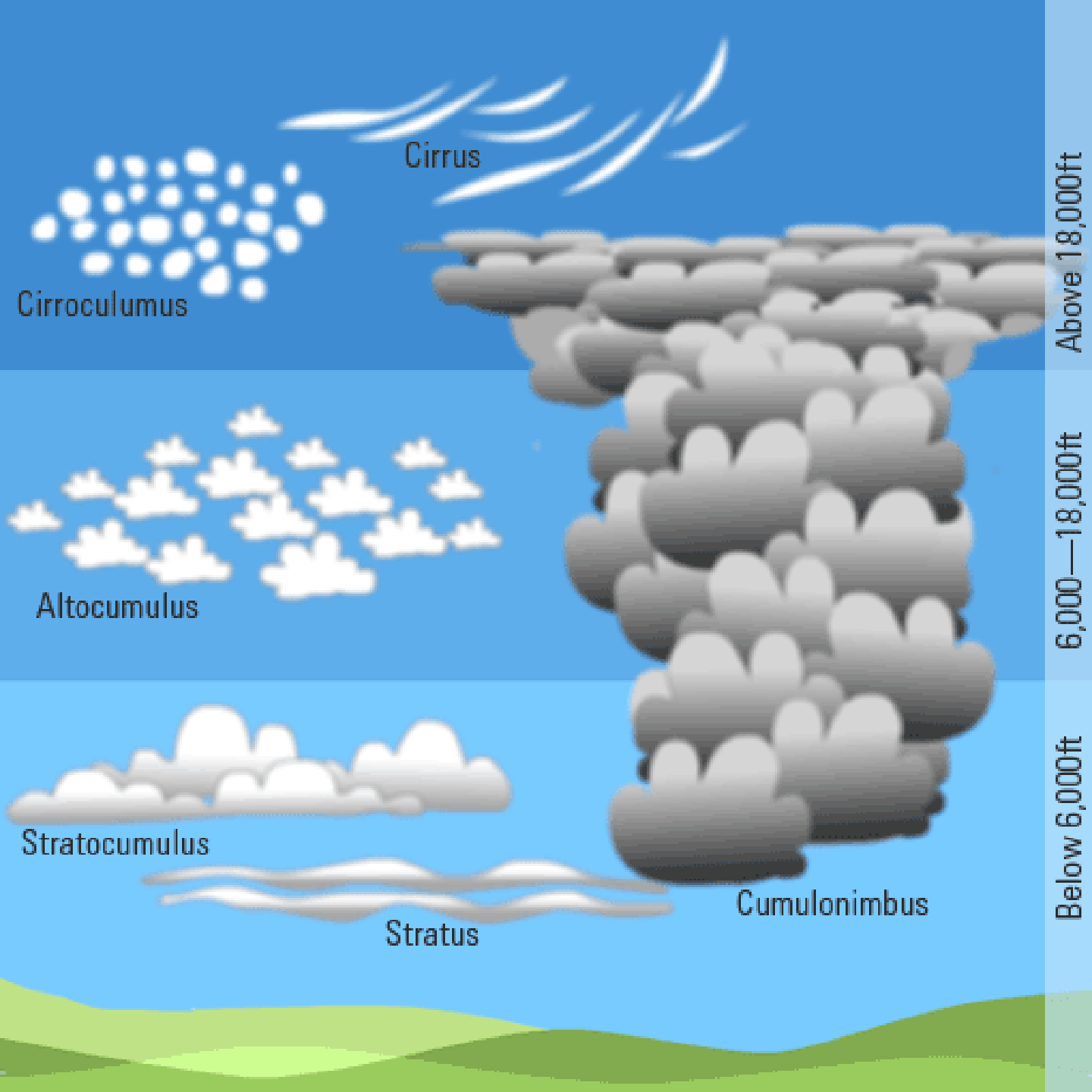
Some types of clouds include:

Cirrus, a thin wispy cloud found high in the atmosphere

Stratus, a long, horizontal cloud found low in the atmosphere. May indicate a light drizzle or snow dusting

Cumulonimbus, a dense, towering, vertical cloud that is associated with rainstorms





Cirrocumulus

Cirrus

Altocumulus

Stratocumulus

Stratus

Cumulonimbus

Above 18,000ft

6,000—18,000ft

Below 6,000ft

Report a Cloud!

Then try to determine what type of cloud it is and circle it



Cirrus?



Stratus?



Cumulonimbus?

Other?

Draw a cloud you see in the sky here

Create Your Own Rainbow

Materials:

- Pom poms
- Paper Clip

Instructions:

Rainbows are formed from the reflection, refraction, and dispersion of light in water droplets. These glorious displays brighten up the sky after it has rained.

Create your own keepsake rainbow using a paper clip and pom poms. First, unravel the paper clip and then bend it into a bow shape. Then take the pom poms and push them one by one onto the paper clip. Try to push the paper clip right through the center of the pom pom, so it stays on better. Continue adding pom poms to the paper clip until you have a finished rainbow.

You can place the pom poms in any order you want; however, if you want to be extra-scientific, try to arrange the pom poms in the actual order that visible light disperses. There's a helpful mnemonic to remember this:

ROY G BIV

Red, Orange, Yellow, Green, Blue, Indigo, Violet



Water Cycle Song

The Water Cycle is the process in which precipitation falls down to the Earth, collects, and then evaporates back into the air. This process is constantly occurring and is cyclical, any water that falls on the Earth will eventually make its way back to the sky. To help you remember the Water Cycle, lyrics to a song and a diagram showing how it works are provided below!

Lyrics:

The Water Cycle

Takes the water and moves it
Up and Down and all around the Earth
Evaporation comes
When the heat from the Sun
Warms up all the groundwater
Then it turns to water vapor
Condensation takes over
It goes up to the clouds
Water vapor cools down
And it changes to a liquid, now
Precipitation happens
When the drops get big
It falls like Rain, Snow, Sleet, and Hail upon my head
I know it's the water cycle happening again
Evaporation, Condensation, Precipitation

