**# \_\_\_\_\_\_\_**

**Reading Weather Maps and Forecasting Weather**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ are used to show a variety of weather conditions in a particular area. They show \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ weather conditions and are used to predict \_\_\_\_\_\_\_\_\_\_\_\_\_ weather conditions.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the condition of the atmosphere outside at any given time. We need to understand weather because it impacts our daily activities, it impacts agriculture, transportation and commerce (what products are sold throughout the year).

Scientists who study and predict the weather are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Their predictions are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Weather happens because the sun warms the Earth more near the equator than it does at the poles. This uneven heating causes large masses of air with different temperatures to form. As these air masses move, they cause changes in the weather.

Weather forecasting includes six main elements:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Weather Instruments**

Meteorologists use a variety of tools to collect data in forecasting the weather.

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| --- | --- | --- | --- | --- | --- |
| Measures air temperature\_\_\_\_\_\_\_\_\_\_\_\_Thermometer clip art clipart star clipart arrow clipart apple | Measures wind speed\_\_\_\_\_\_\_\_\_\_\_\_\_Image result for anemometer black and white | Measures wind direction\_\_\_\_\_\_\_\_\_\_\_\_\_Related image | Measures air pressure\_\_\_\_\_\_\_\_\_\_\_\_\_Image result for barometer black and white | Measures humidity\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Image result for psychrometer black and white | Measures precipitation\_\_\_\_\_\_\_\_\_\_\_\_\_\_https://images-na.ssl-images-amazon.com/images/I/510Qt-c2JrL._SL1000_.jpg |

|  |  |  |
| --- | --- | --- |
| Weather balloons are used to measure temperature, humidity and \_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. They are sent up twice a day to transmit weather data back to computers on the ground.Weather BalloonImage result for weather balloon | Radars monitor \_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.Weather RadarImage result for weather radar | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ provide larger views of weather systems.Weather SatelliteImage result for weather satellite black and white |

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**Radar Image:** **Satellite Image:**



**Weather Maps**

Surface Maps can show pressure systems.

* The \_\_\_\_\_\_\_ stands for highs, or areas of high pressure.
* The letter \_\_\_\_\_\_\_\_ represents areas of low pressure, or lows.

Highs usually bring clear skies, and lows bring cloudy skies with possible precipitation. Highs and lows usually move from west to east across the United States, and bring changes in the weather as they pass.

* Surface maps also show fronts.



Some maps show \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, or lines that join places

that have nearly the same temperature.



Lines that connect points of equal

air pressure are called

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.