



## Day 8- Teachers Notes

# Creating a Weather Journal

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You don't have to have a wide range of instruments to record the weather. Although some people will have a barometer, hygrometer, rain gauge, anemometer and a thermometer, others may rely entirely on information gathered from media sources or the web (or even better you could do a combination of both). But whichever you choose you will find the following a useful guide as you start your students record keeping.

### Time

For comparison purposes from one day to the next and between locations it is important to adopt a standard time for your observations. Official readings are taken every 3 hours from 000 to 2100 hours local time, you can adopt any time. After morning assembly may be a good time say at 9.00am but whatever it is keep to this time every day. For some elements such as temperature it is important to make recordings more than once a day say at 9.00 am and 2.30pm. There is space in the journal for two daily readings.

### Pressure

Most people will use an aneroid barometer to measure air pressure. It is important that the barometer be adjusted to the equivalent of mean sea-level pressure. Most barometers have an adjustment screw for this and you can get advice from the Bureau of Meteorology near you. You should enter barometric readings to the nearest whole hectopascal.

### Temperature

It is important that the thermometer is correctly placed or exposed (refer to fact sheet 3). The temperature should be recorded in the column generally to the nearest degree Celsius, at standard local times eg 9.00am and 2.30pm. Maximum and minimum temps are recorded in another area of the chart.

### Humidity

Measurements can be made with a suitably exposed hair hygrometer. Alternatively you can record a simple estimate based on your own physical comfort (ie low, medium, high humidity). But in this case take care to note the difference between a hot humid Summer's day of 80% humidity and heat which is uncomfortable and a cool Winter's day of 80% humidity. Physical discomfort is related to temperature rather than humidity.

### Wind

It is important to record here both the wind's speed and its direction. Depending on your instruments, you can record the direction according to one of the points on a compass 8-16 preferably. Speeds can be measured in km/h or in knots however the same measurement should be used consistently.

### Cloud

The points of interest to note are the total amount of sky covered by cloud or the individual cloud types or broad groupings. Identifying cloud types isn't as easy as it seems this may take some practice. Another interesting fact which could be recorded is the direction from which the clouds are coming.



## Weather

Fact sheet four gives the guidelines on standard terminology used to describe the weather when you are observing. You may however wish to elaborate on the standard terms, so rather than saying showers you may wish to record showers coming from NW region over Tanami desert or showers light only lasted for 10min. It's up to you to set the parameters.

## Rain

The section on the chart for rain is to record rainfall in millimetres collected in a simple rain gauge given during a certain period. Generally 24 hrs to 9.00am local standard time. The amount is recorded on the day on which the reading is taken. Enter a simple yes/no in the column to indicate whether there has been any rain at all.

## Maximum and minimum temperatures

If you wish to make direct measurements of these temperatures this should be done at 9.00am in the morning and the thermometers reset at this time. You can also find these temperatures in the media or by going to BOM's website [www.bom.gov.au](http://www.bom.gov.au).

## Comments

Use this section to describe the weather features what type of cloud , fire hazes what colour haze , rainbows etc.

## Educational sites on weather

[www.bom.gov.au/library](http://www.bom.gov.au/library)

[www.Ametsoc.org](http://www.Ametsoc.org)

[www.audubon.org](http://www.audubon.org)

[www.earthwatch.org](http://www.earthwatch.org)

[www.wmo.ch](http://www.wmo.ch)

[www.ausgeo.com.au/weather](http://www.ausgeo.com.au/weather)