Astronomy and the Weather

Predicting a frost

Details at http://www.weatherforschools.me.uk/html/forecasting.html

Dewpoint calculator

http://www.dpcalc.org/

Persistence Forecast

7/10 times you may be correct

Dial Weather Predictors

From Nauticalia - Small pocket version - Brass Pocket Weather Forecaster or Desktop Weather Forecaster - https://www.nauticalia.com/

Barometer readings

Keep the barometer indoors away from draughts. Choose a barometer with an indicator eg. GardenMate 3 in 1 Weather Station from Amazon

Weather for Schools

This offers advice on many elements of measuring the weather.
http://www.weatherforschools.me.uk/index.html

Weather instruments

Davies Vantage pro weather stations - research options at https://www.weathershop.co.uk/
Home weather stations – see options – do read reviews - https://www.weathershop.co.uk/
Kestrel Environmental meters – see the range at https://r-p-r.co.uk/kestrel/kestrel.php

Books & Websites

Measuring the Weather – as series of 5 beginners books by Alan Rodgers and Angella Streluk
Rain and Snow -- ISBN 978-0-431-03854-4

Setting up a Weather Station and Understanding the Weather by Roger Brugge ISBN 978-1-78500-161-1
Weather for schools - http://www.weatherforschools.me.uk/
Rain Today - http://www.raintoday.co.uk/
The Met Office, including their forecasts - https://www.metoffice.gov.uk/
Climatological Observers Link - https://www.colweather.org.uk/index.php COL - an association for those keen on observing, recording and sharing weather data.

Alan and Angella Rodgers November 2018
alanrodgers@cirrus.me.uk
Measuring the Weather

Notes

Cloud Heights
- High
- Middle
- Low

Cloud Quantity
- Measured in octas

Cloud Types
- Cirroform - feathery
- Cumuliform - lumps
- Stratiform - layers

Air Pressure - Measured in millibars
- 950 Low
- 1000
- 1050 High

Weather Vane
- Arrow points where wind is coming from
- Site high and unsheltered

Barometer - Site indoors

Thermometer
- Read at eye level
- Bulbs/sensors at 1.25m from ground

Weather boxes
- White in colour, double louvred to let in air but not wind or rain.
- Door opens to the north to avoid direct sunlight

Wind Types
- Continental tropical (cT)
- Continental polar (cP)
- Maritime tropical (mT)
- Maritime polar (mP)

Lift rain gauge to eye level and hold straight

Measuring Rainfall
- Use a standardised rain gauge at a set height above the ground
- Take recordings at 09.00 GMT (UK) or local time