**Wind Speed**

Instrument: Anemometer

Method:

1. **Turn on**. Press the left button

 to turn on the unit.

4. **Select** the wind speed icon.

5. **Turn off**  automatically.

Record Wind Speed and direction in booklet

**Measuring Humidity**

Instrument: hygrometer/wet and dry bulb

Thermometer or Kestrel

Method:

• Read air temperature on the wet bulb

thermometer and subtract it from the reading

of the dry bulb.

• Calculate the difference, match the

temperature difference on the table.

• Follow that column until level with the dry bulb

reading.

• Write the number as a % of air moisture.

Can check humidity with kestrel. Scroll to icon %.

**Measuring Light Intensity**



Instrument: Lux meter

Method:

• Place scale button on x100.

• Turn on power.

• Place light sensor upwards & flat.

• If sunny, place sensor in shade and take a

reading. Then place in the sun and take a

reading. Average the result and multiply this

number by 100. Record your result.

• If overcast, any situation for the sensor is

appropriate.

**Air temp**

Instrument: Kestrel or thermometer

Method:

2. **Turn on**. Press the button to turn on the unit.

3. **Select** the temperature reading.

4. Record temp. OR

1. Read temp off thermometer

**Soil Texture**

Equipment: soil types identification (below), trowel,

water

Method:

• Take a sample of soil (enough to fit in the palm of

your hand).

• Remove vegetation and rocks from the sample.

• Add water and roll into a ball (called a bolus).

• Move sample between fingers near ear. If gritty it contains SAND – SANDY

If it can make a ball – contains LOAM

IF it can make a snake that holds together when pushed over fingers, it contains clay.

**Measuring pH**



Equipment: mixing tray, pH colour chart, universal

indicator, barium sulphate, trowel, gloves

Method:

• Place a soil sample on plastic tile.

Vegetation and rocks should be removed from

the sample.

• Place 3 drops of universal indicator on the

sample and mix.

• Add soil or indicator until a pasty consistency is

achieved.

• Sprinkle barium sulphate over the paste but

don’t mix.

• Compare the colour of the barium sulphate with

the pH colour chart and record the pH result.

**Soil Moisture**

Equipment: Green Moisture Metre

Method:

Insert probe tip to 5cm to root level.

Record soil moisture.

**Soil Temperature**



Equipment: thermometer probe

Method:

Dig a hole with stick about 5cm deep in soil.

• Place the thermometer in the soil so that the

metal stick is in the soil.

• Take a reading after 1 minute with the

thermometer still in the soil

 • Record the temperature reading as °C.

**Aspect**

Aspect is the direction that a slope faces. It identifies

the steepest down slope direction at a location on a surface.

It can be thought of as slope direction or the compass direction a hill faces.

Instrument: Compass

Method:

1. Stand facing downhill – the way a ball would roll if set away down the hill.

2. Point your compass in the direction of the fall-line – i.e. with direction of travel indicator pointing downhill.

3. Rotate the compass housing so that the arrow lines up with the pointer of the compass needle.

**Measuring Slope**

Instrument: clinometer

Method:

• Find the direction of the slope.

• Stand 2 team members side by side with one

holding the clinometer. Determine the eye

height of the person with the clinometer relative

to the other person.

• Stand 10 metres apart along the slope.

• Aim clinometer at the eye height position. Use

the sight on top of the clinometer.

• Press in the trigger and release when steady.

• Read the angle of the slope and record on worksheet.