Year 6: Science, Mathematics and Technologies

Reference: The Beaufort scale

The Beaufort scale

Winds can range from the lightest of breeze to a severe hurricane. In 1806, Admiral Sir Francie Beaufort devised a scale for measuring winds at sea by observing what they did to sailing ships and waves. His scale was changed for use on land and is still used today by weather stations, sailors, pilots and fishermen.

Students can apply the Beaufort Scale to their local weather over a period of two weeks or longer and then graph the data.

Description	Km/h	Sea	Land
Calm	0-1	Water like a mirror	Smoke rises vertically
Light air	1.-5	Ripples form	Smoke drifts
Light breeze	5-10	Small waves form	Leaves move slightly
Gentle breeze	10-20	Crests of waves curl over	Flags flap, leaves and twigs move
Moderate breeze	20-30	White caps on waves	Dust raised, branches sway.
Fresh breeze	30-40	White caps on waves, sea spray	Small trees sway
Strong breeze	40-50	Large waves, lots of white caps and spray	Branches sway
Moderate/Fresh gale	50-70	Foam on sea blown into streaks by wind	Trees sway, walking difficult
Gale	70-90	High waves, dense foam, lots of spray	Branches break, leaves pulled off, difficult to stand up
Whole gale	90-120	Surface of sea white with poor visibility	Trees uprooted, some buildings damaged.
Cyclone	120+	Air filed with spray and foam, sea white with foam	Houses destroyed, forests uprooted.

Note: *Hydro Tasmania has prepared a Wind Turbine Performance compared to Beaufort Scale for further reference.*