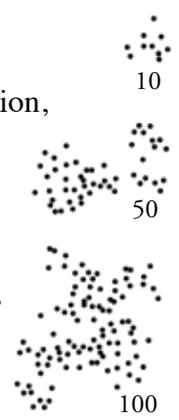


BIOMETRICS

one step = feet
 one step = meters

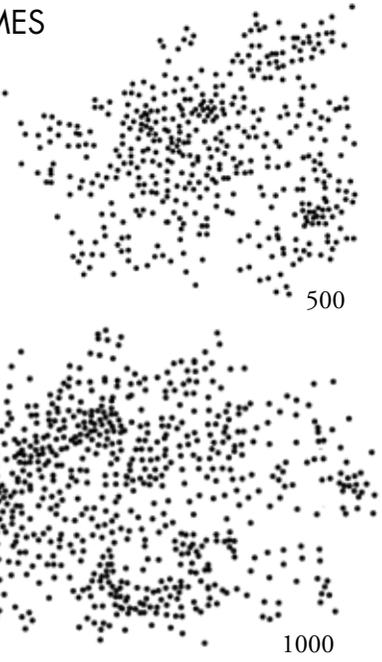
JOURNAL ELEMENTS

- Metadata: date, location, weather
- Objective observation: writing, illustration, diagram, blueprint (plan/elevation)
- Personal insight: diary, poetry, art
- Questions (I wonder, could it be)
- Connections (it reminds me of)
- Quantification & scale: estimate, count, measure (¹/₁, x3)
- Lists

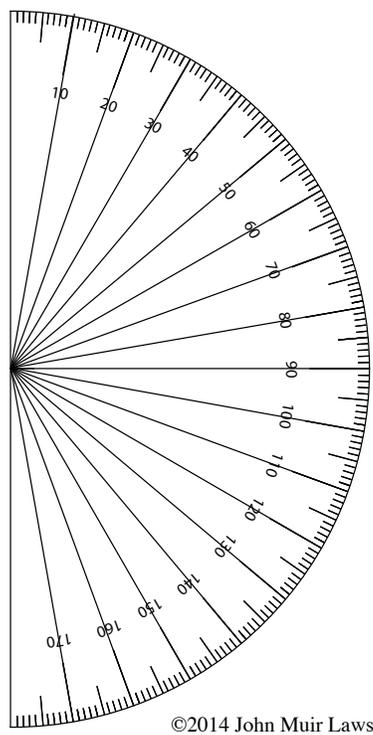


INVESTIGATION FRAMES

- Individual-species acct.
- Zoom in, Zoom out
- Behavior storyboard
- Comparison
- Collection
- Timeline
- Mapping



BEAUFORT WIND SCALE



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- 0** Calm <1 mph (< 1 km/h) Smoke rises vertically. Flat, glassy water.
- 1** Light air 1–3 mph (1.1–5.5 km/h) Smoke drift indicates wind direction. Leaves and wind vanes are stationary. Ripples without crests.
- 2** Light breeze 4–7 mph (5.6–11 km/h) Wind felt on exposed skin. Leaves rustle. Wind vanes begin to move. Small wavelets. Crests have glassy appearance, not breaking.
- 3** Gentle breeze 8–12 mph (12–19 km/h) Leaves and small twigs constantly moving, light flags extended. Large wavelets. Crests begin to break; scattered whitecaps.
- 4** Moderate breeze 13–17 mph (20–28 km/h) Fairly frequent whitecaps. Dust and loose paper raised. Small branches begin to move. Small waves with breaking crests.
- 5** Fresh breeze 18–24 mph (29–38 km/h) Branches of a moderate size move. Small trees in leaf begin to sway. Moderate waves of some length. Many whitecaps. Small amounts of spray.

- 6** Strong breeze 25–30 mph (39–49 km/h) Large branches in motion. Whistling heard in overhead wires. Umbrella use becomes difficult. Empty plastic bins tip over. Long waves begin to form. White foam crests are very frequent. Some airborne spray is present.
- 7** High wind, moderate gale, near gale 31–38 mph (50–61 km/h) Whole trees in motion. Effort needed to walk against the wind. Sea heaps up. Some foam from breaking waves is blown into streaks along wind direction. Moderate amounts of airborne spray.
- 8** Gale 39–46 mph (62–74 km/h) Some twigs broken from trees. Cars veer on road. Progress on foot is seriously impeded. Moderately high waves with breaking crests forming spindrift. Well-marked streaks of foam are blown along wind direction. Considerable airborne spray.
- 9** Strong gale 47–54 mph (75–88 km/h) Some branches break off trees, and some small trees blow over. Construction/temporary signs and barricades blow over. High waves whose crests sometimes roll over. Dense foam is blown along wind direction. Large amounts of airborne spray may begin to reduce visibility.
- 10** Storm, whole gale 55–63 mph (89–102 km/h) Trees are broken off or uprooted, structural damage likely. Very high waves with overhanging crests. Large patches of foam from wave crests give the sea a white appearance. Considerable tumbling of waves with heavy impact. Large amounts of airborne spray reduce visibility.

