

temperature

pH

turbidity

dissolved
oxygen

WHAT	HOW	WHY
Vibration of atoms/molecules HEAT	°F, °C 0 C = 32 F = FREEZE 22 C = room 100 C = 212 F = BOIL 7-14 (creek)	Fish thrive at certain temps. Also as temp ↑, DO ↓
H ⁺ vs. OH ⁻ more H ⁺ : acid more OH ⁻ : basic H ⁺ = OH ⁻ : neutral	1-7 acid 7-14 basic 7 = neutral (5.5-8)	Organisms prefer certain pH ranges pH also matters for drinking H ₂ O
the amount of visible "stuff" floating in water	0 = clear 100 = cloudy 300 = not see-through "NTU's"	High turbidity can clog gills High turbidity isn't ideal for drinking or recreation
O ₂ gas trapped in water	0-15 (or so) creek: 6.5-13 mg/L	Fish/wildlife breathe O ₂ in water!

Water quality:

FOR WHAT

PURPOSE?

WHAT'S THE
CONTEXT?

(Fish/wild life)

(Drinking/health)

Set up D.O. sensor:

1. Unscrew sensor cap
2. Put a small amount of DO electrode filling solution (lighter colored bottle) in the cap
3. Re-attach cap to sensor
4. Plug in sensor & start logger pro

DO sensor calibration:

1. Calibrate to 0 with brown bottle
(immerse the sensor)
2. Rinse sensor & blot dry
3. Calibrate to 8.7 with O-ring bottle
(hover above a small amount of water)

DO Sensor dem-up:

1. Dump out cap, rinse, & blot dry
2. Screw cap on ONLY PARTWAY
3. Each kit should have:
 - sensor w/cord wrapped up
 - brown bottle
 - DO filling solution
 - O-ring bottle

TODAY : WQ PROJECT

① Have a WITRB Question:

5 min. "Witrb the water quality of Jackson Creek and _____ of _____?"

② Try to collect some data

Alone or
with a
partner
(40 mins.)

Location	temp	pH	Turb	DO	Other factor
Bridge					
Gully					