1. What is turbidity? In other words, what is it that the turbidity sensor actually measures?

- Turbidity is the clarity of the water
- It's a measurement of the number of particles — the larger the turbidity, the more particles there are
- The sensor measures reflected light — the more particles there are, the more light will be reflected

2. Why / how does turbidity relate to water temperature? In other words, what is it about increased turbidity that causes water temperatures to go up?

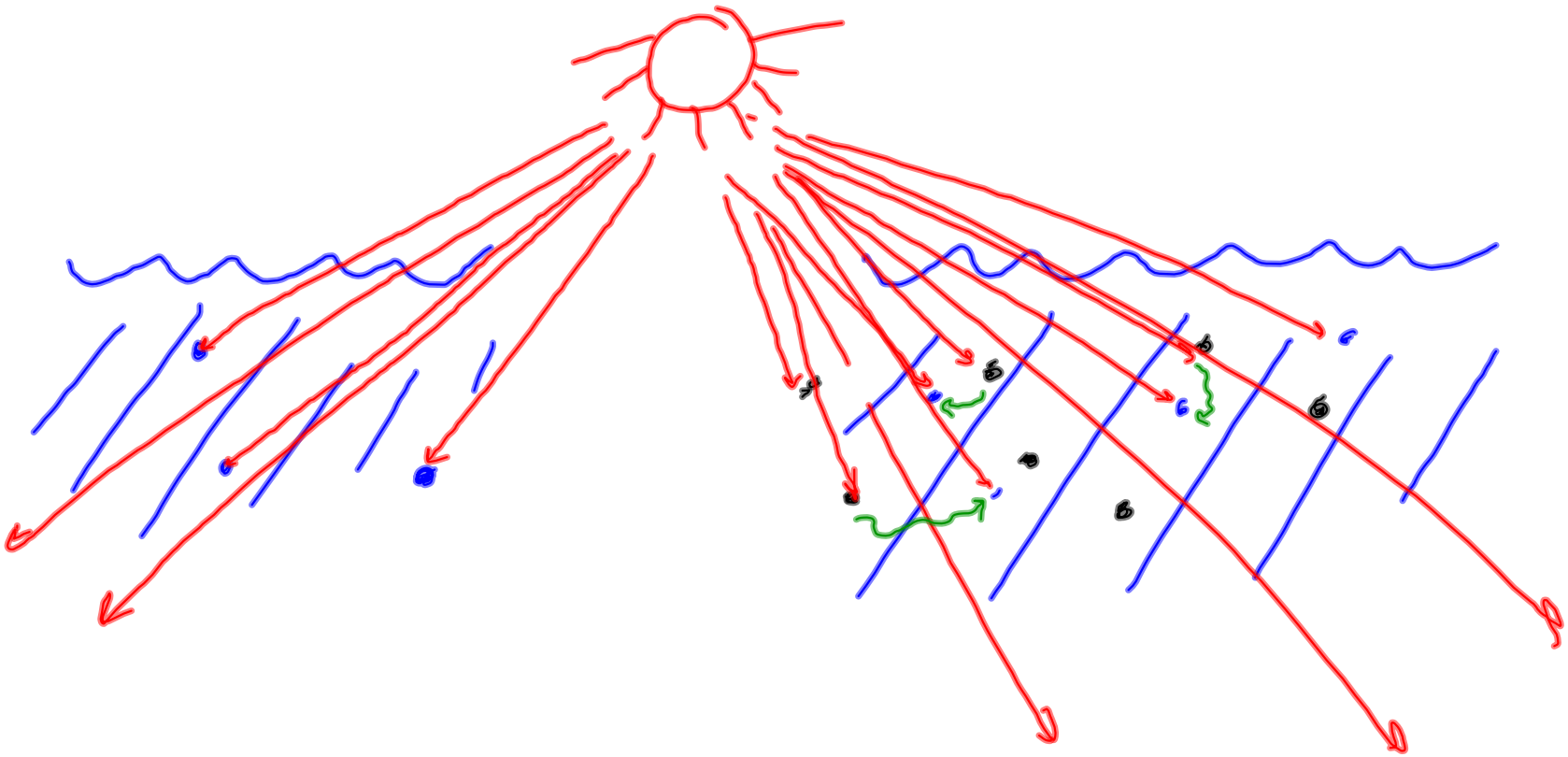
PR: Increasing particles increases darkness, that attracts more sunlight, & temp goes up

nope!

GA: Temp. affects turbidity — ↑ temp = ↑ plants = ↑ turbidity

HH: ↑ particles make water darker - so it'll get colder faster and hotter slower

Particles in water can absorb the heat and energy from sunlight. (They can absorb a <u>lot</u> if they're dark) - this causes the particles to heat up. The particles then transmit that heat to the water.



3. What happens to plants when you increase turbidity in water?

not completely correct...

(HC) Plants grow more because of increased temp

(HH) Decreased sunlight reduces plant growth

(BB) 1st, plants grow more, the bacteria kill them off

(SY) ↑ turb. ↓ plant growth, ↑ DO, ↓ plant growth

Increase of turbidity can have different effects on plants — sometimes plants grow more (temp), sometimes they grow less (bacteria and/or sunlight), sometimes there's no effect. It depends primarily on two things:

1. The amount and type of turbidity
2. The amount of time the turbidity is in the water