



1st Quarter Notes

- I. Lamps
 - a. Incandescent → Heat some sort of filament
 - b. Tungsten-Halogen → Tungsten filament, Halogen atmosphere
- II. Measurement
 - a. Lumens → Light Energy
 - b. Foot-Candles → Illumination
 - c. Color Temperature
 - i. Sun = 5600° / True White (can be split with prism)
 - ii. 2800° = Standard.
- III. Behaviour
 - a. Reflection
 - i. Direct / Specular [Mylar]
 - ii. Spread [Crumpled Tin Foil]
 - iii. Diffuse [Velour]
 - iv. Mixed (combination of above) [CD Case with Art under plastic]
 - b. Refraction
 - c. Absorption
- IV. Functions of Light
 - a. Visibility. Different than everyday visibility – special, unique, selective (we can choose what is visible)
 - b. Focus. Selective. On *what* do people focus?
 - c. Modeling. 3D / Plasticity. Make it feel *real*. TV's soaps, as opposed to sitcoms.
 - d. Placing the Action. Setting.
 - e. Reinforcing the Theme. Theme as in “morals” not “I like the Coffee theme.” No happy colors for unhappy productions.
 - f. Mood. *Last!* Don't create an “Art Project.” Ensure visibility, etc *first*. Then focus on mood.
- V. Controllable Qualities of Light
 - a. Intensity → Brightness. Linked to distribution. Visual and Emotional intensity.
 - b. Form / Distribution → Angle, Focus, Placement, Spot/Flood.
 - c. Color
 - d. Movement
 - e. Time / Tempo / Rhythm
- VI. Lighting Positions
 - a. Wings. Wing1-Right, Wing1-Left, etc. Booms.
 - b. FOH (Front of House) pipes.
 - c. Box Boom(s)
 - d. Balcony Front.
- VII. Electricity
 - a. Voltage → Difference between positive/negative charged “ends”.
 - b. Current / Amperage → How *much* is flowing?
 - c. Watts → Work Done. Comparable to Horse Power (not the same)
 - d. $W = VA$ (Mnemonic: West Virginia)
 - e. All cable, connectors, circuits, etc rated in ampacity (capacity of amperage). Exceeding rated capacity causes heat and fire. (Bad.)