Q: What is the maximum number of data points that can be shown on my screen?
4,000,000,000,000 YEARS

vs.

70 YEARS
Part I: Edges
100 Million Rods and Cones

Center

Surround

Receptive field center

Receptive field surround

100 Million Rods and Cones
Ganglion cell

Receptive field center

Receptive field surround

Horizontal cell

Bipolar cell

Ganglion cell
Actual luminance distribution
Takeaway: Give them an EDGE, they’ll take a mile.
Part 2: Color
THE ELECTROMAGNETIC SPECTRUM

These waves travel through the electromagnetic field. They were formerly carried by the aether, which was decommissioned in 1997 due to budget cuts.

**Absorption Spectra:***
- Hydrogen:
- Helium:
- Tampax:
  - Red
  - Orange
  - Yellow
  - Green
  - Blue
  - Violet

**Visible Light**

**Power & Telephone**
- Radio & TV
- Microwaves
- Toasters
- IR
- UV
- X-Rays
- Gamma/Cosmic Rays

**Sound Waves**
- Audible Sound
- Ultrasonic Waves
- Emphysema

**Sound Waves in the Air**
- High-pitched waves

**Other Waves:**
- Sunken Waves

**Shouting Car Dealership Commercials**
- CIA
- Ham Radio
- Rogers Radio

**Cell Phone Cancer Rays**
- Gravity
- Aliens
- SETI

**Supreme Heat Vision**
- Sunlight
- Moonlight
- Carbon Fiber Laser

**MASS-GRADE X-RAYS**
- Sinister Google Projects
- X-Rays

**SINISTER ZAPPA-PRO**
- X-Ray Glasses

**The Wave**

**Power & Telephone**

**Frequency (f) vs. Wavelength (λ)**

**General Formula**

\[ f = \frac{c}{λ} \]
Trichromatic Theory
Ewald Hering
Ewald Hering
Opponent Process Theory
RGB: Additive Color
CMYK: Subtractive Color
Intuition will get you pretty far in this game.
Low-Level Data Types

Nominal: Male, Female ( = , ≠ )

Ordinal: G, PG, PG-13, R ( >, ≥, <, ≤ )

Quantitative: 1.1, 1.3, 1.8, 2.4 ( +, -, *, /, etc.)
Nominal:
- Male, Female

Ordinal:
- G, PG, PG-13, R

Quantitative:
- 1.1, 1.3, 1.8, 2.4
- (=, ≠)
- (> , ≥ , < , ≤)
- (+, -, *, /, etc.)

6-8 colors
- name that color
- vary the hue
- vary the saturation or luminance

name that color
- vary the hue
- vary the saturation or luminance

Quantitative:
- 6-8 colors
Part 3: Gestalt
Ask for feedback.