

Ch 1 Astro Reading Notes

1.6 Tour of the Universe

- Earth



$$d \approx 13,000 \text{ km}$$

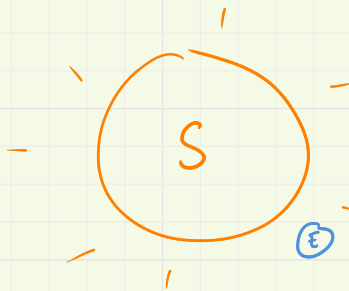
$$1 \text{ mile} \approx 1.6 \text{ km}$$

- Moon is nearest astronomical neighbor



$$d_m = 3476 \text{ km}$$

- Sun is 1 AU away ≈ 150 million km ≈ 8 l-min



$$d = 1.5 \times 10^8 \text{ km}$$

by comparison (scale) if sun size of basketball, Earth is an apple seed

Planets
Sun, Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune

↳ can only see because of reflected light

- difficult to see planets around other stars
- Stars powered by Nuclear fusion

- Milky Way

- all the stars we see w/ the naked eye are in the Milky Way Galaxy
- hundreds of billions of stars in the galaxy



sun is 30,000 ly from center of MW

- vacuum of space still contains enough dust to block light from distant stars