

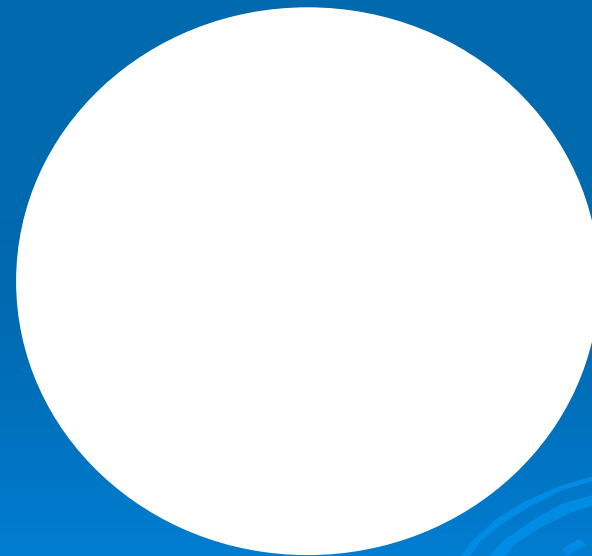
Circle

Area of a Circle

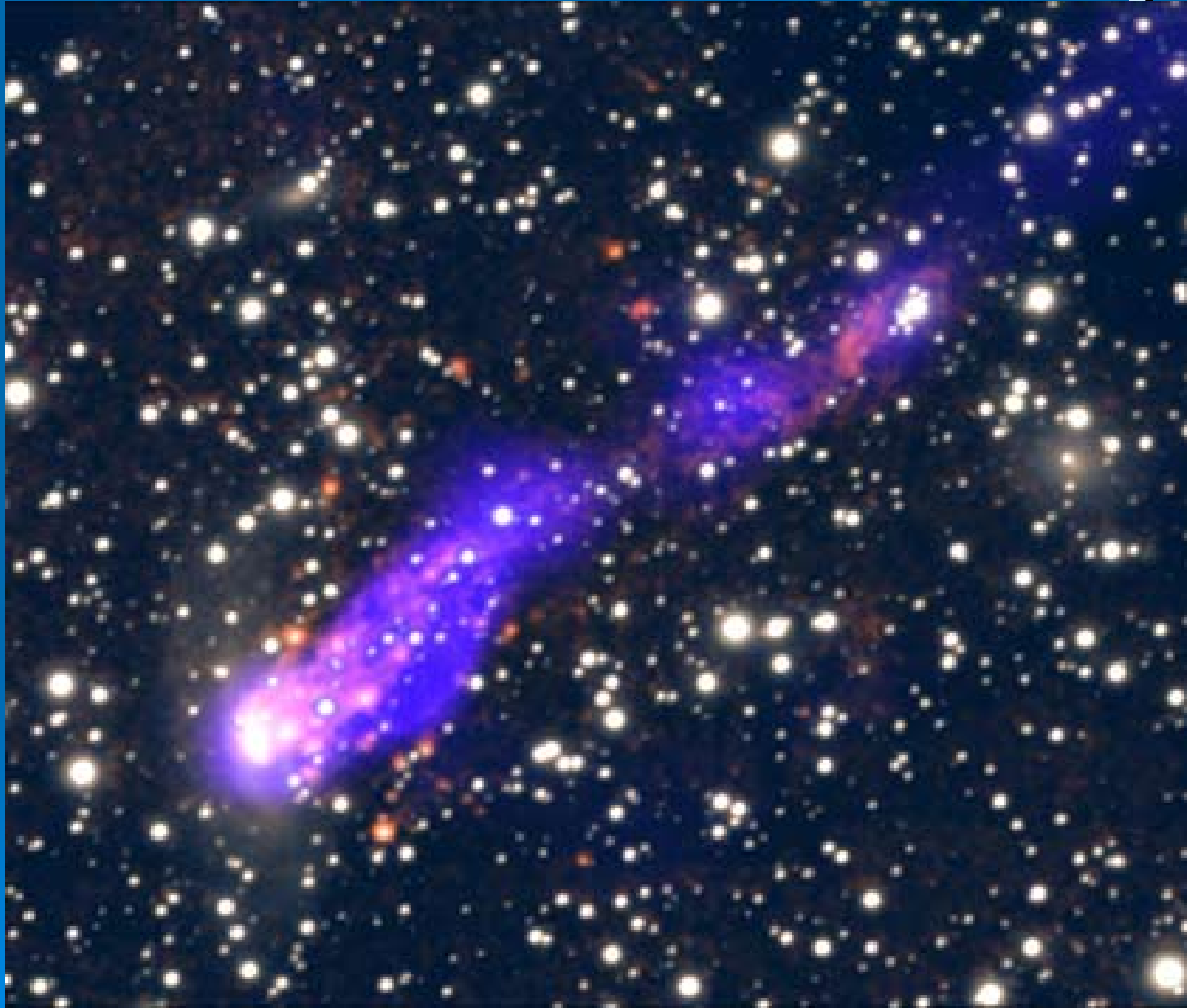
$$\text{Area} = \pi r^2$$

Circle

- Circle- is a line forming a closed loop, and every point on which is fixed distance from a center point.

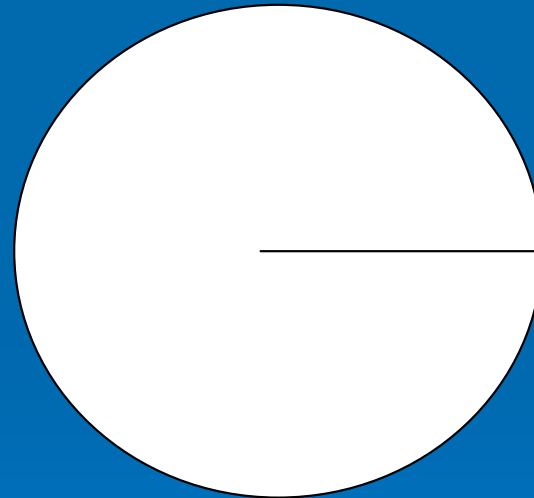


Stars are fixed in the sky



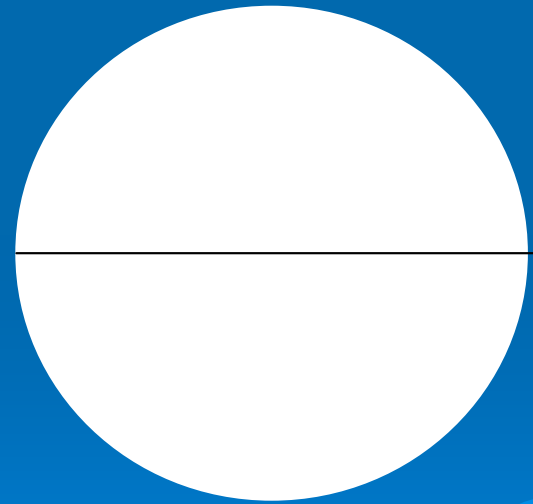
Radius

- Radius- is the distance from the center to any point on the circle.



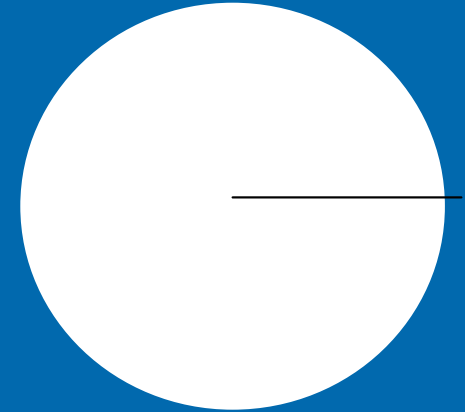
Diameter

- Diameter- the distance across the circle

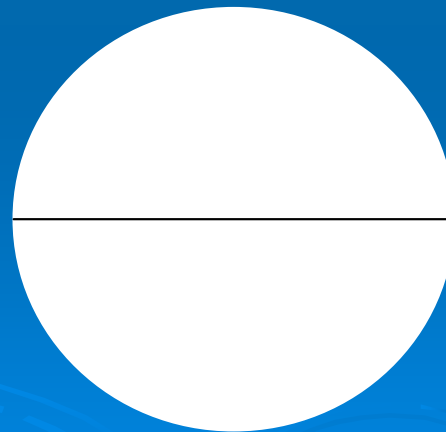


Radius vs Diameter

- Radius is $r = \frac{1}{2}$ the diameter



- Diameter is $d = 2r$



Pi (Pie)

- Pi comes from the Greek letter P which is written as π . Pi written as a decimal value equals 3.142 or as an improper fraction $\frac{22}{7}$. Pi is an approximation.
- $\text{Pi} = 3.141592653589793\dots$

Area of a Circle

- The formula for Area of a circle = πr^2
- Where r is the radius of the circle
- Where (pi) π is approximately 3.142 or $\frac{22}{7}$

Using the Area of a circle formula

- Area = πr^2
- Radius = 4 mm
- Area = $(3.14) (4)^2$
- Area = $(3.14) (16)$
- Area = 50.24 mm^2

Practice

➤ Area = πr^2

➤ 1. Radius = 8 inches

➤ 2. Radius = 5 meters

➤ 3. Radius = 7 feet

Practice

- What if you are asked to find the area of a circle and you are given the diameter
- 16 m?