## DETERMINE THE AREA AND CIRCUMFERENCE OF A CIRCLE

- The circumference of a circle is the distance around the outside.
- The diameter of a circle is the distance across the inside of a circle through the center.
- The radius of a circle is half the diameter.
- The circumference is calculated by multiplying the diameter of the circle times the value of pi (n) which is approximately $\mathbf{3 . 1 4} \rightarrow \mathbf{C}=\boldsymbol{n} \mathbf{D}$
- The area of a circle is the space contained within the circumference. It is measured in sauare units.

- $\mathbf{C}=\boldsymbol{n} \times \mathrm{D}$
- $D=8 \mathrm{~cm}$
- $C=3.14 \times 8$
- $C=25.12 \mathrm{~cm}$.
- Use the formula $\mathbf{A}=\boldsymbol{\pi} \times \mathbf{r}^{2}$ to calculate the area of a circle.
- Input the length of the radius and perform the operation.
- $A=n \times r^{2}$
- $D=12 \mathrm{~cm} \rightarrow r=6 \mathrm{~cm}$
- $A=3.14 \times 6^{2}$
- $A=3.14 \times 36$
- $A=113.04 \mathrm{sq} . \mathbf{c m}$
- $A=n \times r^{2}$
- $D=20 \mathrm{~cm} \rightarrow r=10 \mathrm{~cm}$
- $A=3.14 \times 10^{2}$
- $A=3.14 \times 100$



## Try This!

1. What is the area of a circle with a diameter of 24 inches?
$\qquad$
2. What is the area of a circle with a radius of 15 cm ?
3. 
4. 



