

The Ice-Cream Scoops

By Esme Richards

Once upon a time there was a shop that sold ice-cream. One day a boy called Fred came to the shop and he looked sad so the shopkeeper asked him what was wrong. The boy said he was sad because, at school everyone was making fun of him because he did not know how to measure circles and all the special words. The shopkeeper said his name was Jimmy and he would help him learn about circumference, diameter, radius and the area of a circle.

So the next day Jimmy woke early so he could prepare his shop and teaching space.

Fred also woke up early, he was excited for the other boys would not tease him about the circles for he would know about the maths after his special lesson.

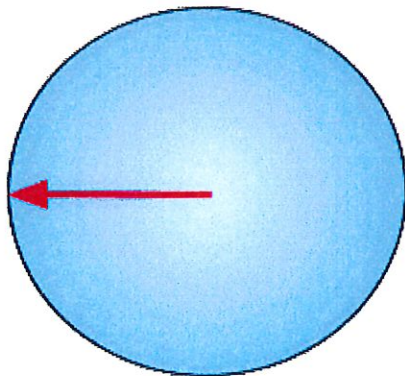
when he got to the ice-cream shop Jimmy was ready for Fred and had some ice-cream for the boy. They sat down and started.

Jimmy said let's start with the baby **radius** because you can find the rest out with just him. You will need a little help from my friend Pi, who is worth 3.14.

The **radius** is half of the length of the diameter.

The radius of this circle is 5 cm.

The arrow line is the radius.

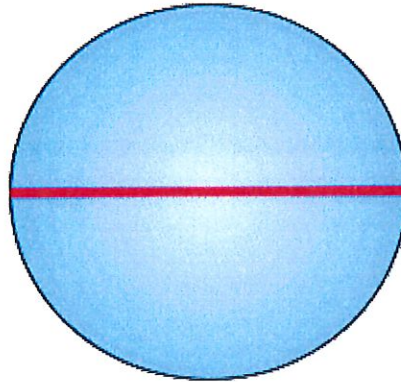


The **diameter** is just doubling the radius.

So in this case it would be

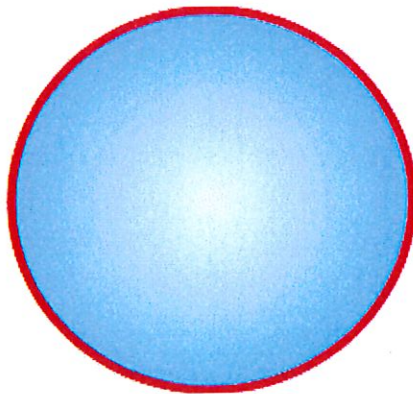
$$2 \times 5 = 10 \text{ cm}$$

The red line is the
diameter.



And the circumference is **all** the
way around the outside of the circle.

The red line is all
the way around
the outside so
that means it is
the
circumference.



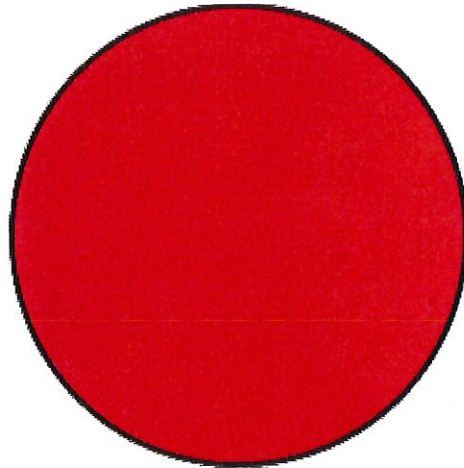
To find the circumference you need some help from my friend Pi.

$$\text{Circumference} = \pi \times \text{diameter}$$

$$\begin{aligned}\text{Circumference} &= 3.14 \times 10 \\ &= 31.4 \text{ cm}\end{aligned}$$

Now it is time to learn about area so...

The red area in the middle is the area and you work this out by.
 $\pi \times \text{radius} \times \text{radius}$



$$\begin{aligned}\text{Area} &= \pi \times \text{radius} \times \text{radius} \\ &= \pi \times 5 \times 5 \\ &= \pi \times 25 \\ &= 78.53 \text{ cm}^2\end{aligned}$$

Now I know everything about circles.

Thank you Jimmy, no one will be mean to me any more.

"You are welcome!" said Jimmy, "good bye" said Fred.

THE END