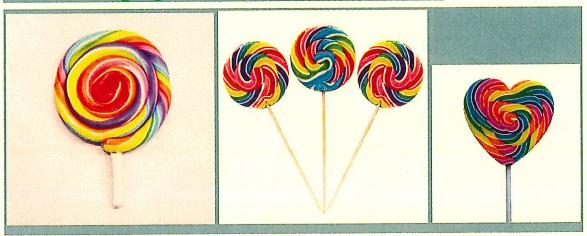
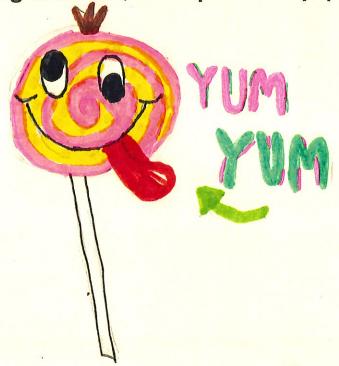
The story of the lollipop taster!



Once upon a time there was a shop full of lollipops the owner was called Radius he was very funny and loves lollipops. Radius had a tester called circumference to make sure all the lollipops were ready to sell. He also has to think of new ideas to make all the new lollipops. Everyone came from far and wide to taste these mouth watering delicious, scrumptious lollipops.





Later that day at 4:00pm Radius comes back. Look, I've got a new one, it's a giant lollipop. Circumference says it's huge and I can't fit it in my mouth. Okay I made a backup just in case. What about this one, it's a hexagon. It's too rough, says circumference.

WAIT !....

I know just the person says circumference; lady diameter

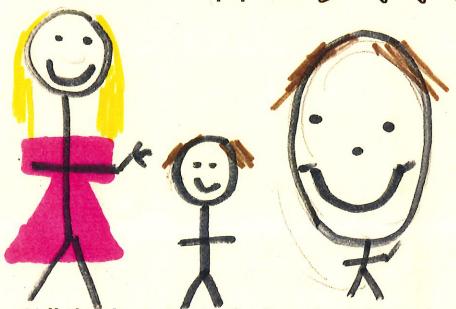
Radius made this new lollipop and he said to circumference "look I invented a new design don't you think it's peculiar? I think it will be a bestseller. Are you ready to taste it?" circumference was puzzling: its flavoured blue raspberry with sherbet inside and best of

all its a triangle. A triangle! Says circumference here goes nothing. He places the oddly shaped lollipop in his mouth. Radius' mouth is grinning, saying isn't it great? Suddenly Circumference lets out a screech OUCH! It scratches and cuts my mouth.

Oh,says Radius, I'll try a new one. But was the flavour nice? YES it was it was mouthwatering it was just the shape. Let me go back to the workshop and the next will be the

winner, I promise.

she's twice your height radius and she'll help you make the perfect lollipop. I'll call her. I'm sure she'll be happy to help. The next day at noon there was a knock on the lollipop factory door. It was lady diameter "hello Radius, hello Circumference, I'm here to tell you all about circles and to make the best lollipop EVER!



First of all the diameter is the length of the widest bit of the circle. The radius is half the size of the diameter. The radius is the distance between the centre of the circle and the edge. The circumference is the length all the way round a circle. In different shapes it's called the perimeter but circles are special.

Circumference = pi x diameter

How do we find the Area (2) ? ? ? Some circles are rather vicious but you can't be scared because the area of the circle is pi r squared.

This means Area = pi x radius x radius.

"So" said Lady diameter "here's a calculation for you.

If the radius is 4cm, what is the diameter?"

The diameter is $2 \times radius = 2 \times 4 = 8 \text{ cm}$.

"How do I find the circumference?"

Circumference = pi x diameter Circumference = pi x 8 cm 3.14 x 8 = 25.13 cm "Now we are going to find the area.

If the radius = 4 cm, then the area = pi x radius x radius

 $= 3.14 \times 4 \times 4$

= **50.27** cm squared"

"So" says lady diameter "I think your perfect lollipop is a circle. It is not scratchy and not too big, just perfect."

"Thank you lady diameter"

