# EXPORING CIRCLES

NAME_____ PARTNER _____

On the back of this page keep a vocabulary list of the words you will need to know when doing this experiment. Your teacher will tell you them, but you may know some of them already.

First, after choosing a partner, find several circular shapes to list and measure each's diameter and circumference in metric millimeters (mm). Record your the shapes and measurements below.

CIRCULAR SHAPE         measure diameter (d)  measure circumference (C)    how many times longer
                                                                          is the d than C? (C/d)

Hopefully you can do the last column calculation by hand and also using a calculator. Show your work on the back of this data sheet. Careful what you enter into the calculator.

1.   a penny or _____        _____mm              _____mm              _____ / _____ = _____

2.   a quarter or _____       _____mm              _____mm              _____ / _____ = _____

3.   a _____          _____mm              _____mm              _____ / _____ = _____

4.   a _____          _____mm              _____mm              _____ / _____ = _____

5.   a _____          _____mm              _____mm              _____ / _____ = _____

Look at the last column to the right of your data above. Is there a pattern of how many times the diameter (d) "fits into" the distance around the circle (C)? _____, the circumference (C) is about _____ times as long as the diameter (d).  Will this work with every circle? _____  Why do you think the number isn't exact here? _____

What does this picture to the left have to do with all of this?