**![C:\Users\kmoore7\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\AY0NMO5R\MM900283803[1].gif]()**

**![C:\Users\kmoore7\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\JG87QUY8\MC900105082[1].wmf]()**

**Mystery Ratio and the Discovery of Pi**

**Directions:**

Using the materials provided, measure the circumference and diameter of a variety of objects.

|  |  |  |  |
| --- | --- | --- | --- |
| **Object Name** | **Circumference (C)** | **Diameter (D)** |  **Mystery Ratio**  |
| 1. |  |  |  |
| 2. |  |  |  |
| 3. |  |  |  |
| 4. |  |  |  |

5. What whole number is this ratio closest to?

6. Look at the mystery ratios on your worksheet. How close do your ratios come to 3.14?

7. Why might your ratios be a bit different? Think of more than one reason if you can.

8. Someone brings a huge pizza into the room and tells you that the diameter of the pizza is 4 feet. Use your knowledge of pi to estimate what the circumference of the pizza is.

Estimate:

9. Would you rather have a pizza that has a circumference of 36 inches or a diameter of 36 inches? Explain your answer.