

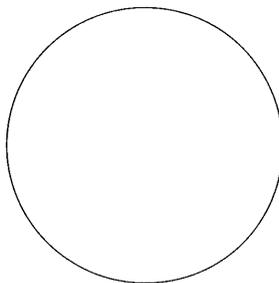
MOVING AROUND A CIRCLE

Draw a circle, about four inches in diameter, on a piece of waxed paper. Use folding and pinching to locate the center of the circle, C . Draw a point, P , inside the circle, but off-center. Fold the circle so that P along is on the circumference. Crease the fold line. Repeat by moving P along the circumference 25 to 30 times, creasing the fold each time. Open the paper and trace the curve formed by the envelope of crease lines.

What do you observe about the curve formed? How are the points P and C located with relation to each other and to the curve? Repeat with different-size circles and different positions of P .

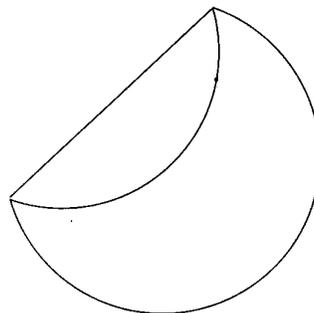
You May Need

- felt pen
- ruler
- poster board
- waxed paper



To Get Started

- Select a point on the curve and measure its distance from C and its distance from P .
- Repeat for four other points on the curve, and record your data.
- Repeat using larger and smaller circles.



Your Findings

Paste your circles with the curves formed on the poster board for display. Below each circle, list your observations about the curve and the points C and P . If the curves look familiar, tell where you have seen curves like these.

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