Symmetry

A unifying thread across grades and cultures

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Workshop Links

1. Recognizing Symmetries
    Enter the rotation numbers, show some mirrors.

2. Making Symmetric Figures
    Fill the shapes with pattern blocks. Try for different symmetries.
    Record and share your designs here:
    3. Symmetry Screenshots
    (find the right slide for your design; shrink your design if needed)

Many More Activities

The Symmetry page on my website includes:
◊ a hands-on unit for grades 1-6
◊ an online unit for middle school and high school
◊ and much more.

See also the Tiling home page on my site.

Connections and Extensions

Isometries (rigid motions): Applets | Unit (grades 7-10)
Geometric transformations

Introduction to Abstract Algebra (grades 7-12)

Space (a high school elective course — advanced geometry after Algebra 2)

Bibliography

I used images from many cultures in my slides. I found most of them in Peter S. Stevens' book:
Handbook of Regular Patterns (MIT Press, 1980).

The pattern block activity is from my *Geometry Labs* book (free download).
Chapter 5 is all about symmetry, and Chapter 7 is about tiling.