LHS GEMS Build It! Festival

Target Audience: Youth in grades kindergarten through sixth grade.

Description: Bring out the builder in all of your students! These open-ended activities allow for students to learn new mathematical skills through hands-on learning activities using pattern blocks.

Format: This curriculum is divided into eight activities. The activities can be done in learning centers or as a whole group.

Activity 1: Create-A-Shape
- Youth predict what three-dimensional shape might be formed when the two-dimensional pattern is cut out and folded into the three-dimensional shape.

Activity 2: Dowel Designs
- Youth create two- and three-dimensional structures out of newspaper dowels.

Activity 3: Polyhedra
- Youth make three-dimensional polyhedras using snap-together triangles, squares, and pentagons.
***These building pieces are not included in this kit.

Activity 4: Fill-A-Shape
- Youth use pattern blocks to fill star, triangle, hexagon, and dodecagon shapes that are outlined cards.

Activity 5: Symmetry
- Youth explore bilateral symmetry as they make designs with pattern blocks.

Activity 6: What Comes Next?
- Youth decode patterns constructed out of pattern blocks and then continue building the pattern.

Activity 7: Tessellations
- Youth use pattern blocks to cover a tessellation tiling on a card and then continue building the tessellation so it fills the entire card.

Activity 8: Tangrams
- Youth make their own tangrams and use them to complete various tangram puzzles.
LHS GEMS Build It! Festival teacher’s guide and kit, including pattern blocks, can be borrowed for one month.