

# DOUBLE THE CHALLENGE DOUBLE THE FUN

This advanced design pattern book requires two sets (64 shapes) of unique MightyMind® / SuperMind® Design Tiles. If you presently own either MightyMind or SuperMind activity sets, you can purchase an additional set of 32 Design Tiles (item #44400) from your MightyMind retailer. You may produce your own shapes by following the instructions on the reverse side of this page.



The double size patterns in Super MightyMind's Big Idea Book will provide hours of challenging entertainment and mind-boggling fun for a child who has completed the basic designs in MightyMind or SuperMind activity sets.

A child's ability to analyze and understand how large forms are created from simple elements is an important step in developing the ability to reduce large problems into solvable parts.

Our designers have been intrigued by the idea that the vast universe, as we know it, is composed of relatively few geometric forms that include: circles, triangles, squares, rhombi, semicircles, rectangles and other variations of simple structures. These elements or building blocks combine in space in infinite ways to form our material world. The 32 basic shapes that are included in MightyMind and SuperMind activity sets provide children with "hands-on" experience, illustrating how simple forms can be combined to create whole new structures.

## Follow these simple steps:

- 1** Observe the 64 design tiles (or homemade shapes) and notice that they are divided into 6 basic geometric shapes, 4 colors, large and small sizes. The shapes are also proportional: 2 triangles = 1 (diamond) rhombus; 4 small (diamonds) rhombi = 1 large diamond; 2 small squares = 1 rectangle; 4 small squares = 1 large square; 2 semicircles = 1 large circle.
- 2** Using the design tiles (or homemade shapes), a child has to perform 3 basic activities: FIND – MANIPULATE – BUILD in order to complete a picture. Each page has an outlined picture pattern, which should be completely covered with the shape tiles. Beginning with the first pattern, a child selects tiles and places them over the printed diagram, staying within the bold lines. Some areas of the design such as circles, are obviously outlined to provide an easy guide and encourage a child to begin experimenting. Having "found" and fitted the shapes correctly within the guidelines, the child should maneuver the other tiles to "build" the figure.
- 3** The back cover provides the solutions to each problem. More joy will be experienced by a child who uses these solutions to confirm a final achievement, rather than using them as a guide for building.
- 4** Patterns 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20, and 21 require overlay construction. Shape tiles are placed upon other tiles to add dimension and enhance the finished picture. A "window" is provided adjacent to each pattern as a position reminder.
- 5** Be tolerant. Never push a child that may be having difficulty solving a particular problem. Discovery is part of the joy of learning. Be satisfied as long as a child shows an inclination to want to solve the problem. If you want to assist, provide only small parts of a solution.
- 6** When a child has successfully completed all of the patterns, encourage him or her to create their own designs. The possibilities are endless. Unique designs can be saved by tracing around each shape as tiles are removed. Friends can exchange designs and challenge each other.