HINTS

Tetrominoes, page 4
There are 5 distinct tetrominoes.

Pentominoes, page 5
There are 12 distinct pentominoes.

Polyomino Names, page 6
Eight of them can be folded into a box. If you have trouble finding them, experiment with one-inch grid paper and scissors.

Making Polyomino Rectangles, page 8

1. There are 25 rectangles. Their sizes are:

2 x 2	2 x 3	2 x 4	3 x 3
2 x 5	2 x 6	3 x 4	2 x 7
3 x 5	4 x 4	2 x 8	3 x 6
2 x 9	2 x 10	4 x 5	3 x 7
2 x 11	2 x 12	3 x 8	4 x 6
5 x 5	2 x 13	3 x 9	2 x 14 and 4 x 7

2. Use the monomino in the 3-by-9 rectangle.

Pentomino Family Relationships, page 11

1. Look at your tetromino family trees.
2. Students may find it helpful to draw a full family tree for each of the pentominoes.

Hexomino Envelopes, page 15
There are 6 hexomino envelopes.

Classifying the Hexominoes, page 16
Eleven can be folded into cubes. If you have trouble finding them, use one-inch grid paper and scissors to experiment.

Tiling Rectangles, page 27

1. One of them does not tile any rectangle.
2. The Y pentomino tiles a 5-by-10 rectangle.

Doubled Pentominoes, page 32
Use one N in each of these doubles: N, V, W.

Perimeter 10, page 34

1. There are 6 of them.

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Perimeter-Area Predictions, page 36

1. There are 5 different shapes possible.
2. There are 10 different shapes possible.
4. Look at the table on page 35. Double each area number and then look at the corresponding longest perimeter. Find a pattern.

Eyes, page 38

2. Only 1 pentomino has an eye.

One-Sided Polyominoes, page 40

3. There are 18 of them.

Polyrectangles, page 41

1. There are 3 of them.
2. There are 9.
3. There are 21.

Polytans, page 42

1. There are 4 of them.
2. There are 14.

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