



In-Class Game

Pentominoes

● **Get Ready!**

Separate the class into groups of four.

- Pentominoes master, p. 31
- scissors 
- 1 ruler or yardstick per group 

● **Get Set!**

Make two copies of the Pentominoes master on page 31 for each group: one on regular paper for the group to read and another copy on card stock enlarged (about 140%) so that the rectangle measures 6 in. \times 10 in. Then have students cut out the 12 pentominoes on the card stock.

● **Go!**

- Have each group cut out and try to arrange the pentominoes to form each of the following. They may need to flip the pieces over to fit.

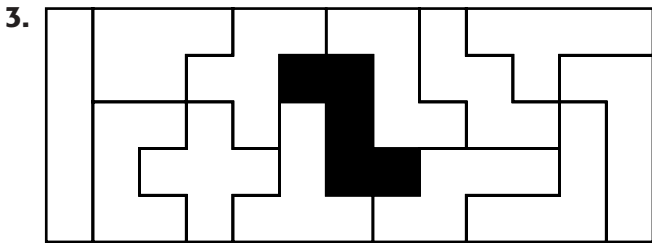
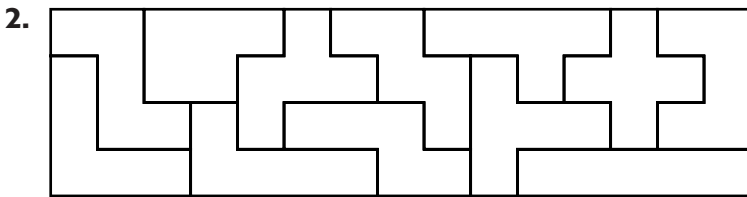
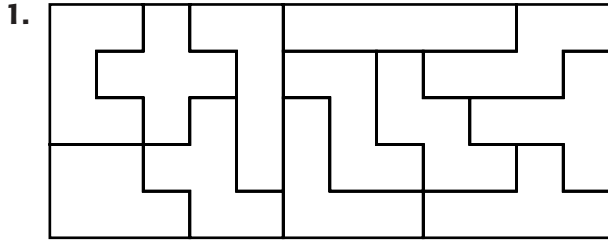
Shape/ Size	Number of Solutions	Points
1. a rectangle that measures 5 in. \times 12 in.	many	10
2. a rectangle that measures 4 in. \times 15 in.	many	10
3. a rectangle that measures 5 in. \times 13 in., but has a hole in the shape of one of the pentominoes	one for each of the twelve shapes	20
4. a rectangle that measures 3 in. \times 30 in.	two distinct	30
5. two rectangles that measure 5 in. \times 6 in.	one	30

In each case, the first group to come up with an answer wins the points. (You may want to give the second group that comes up with an answer half the points of the winning group.)

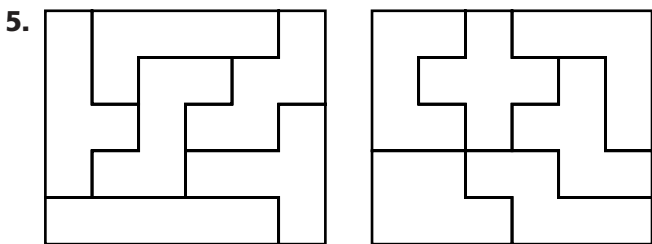
- Sample answers are shown on the following page.

In-Class Game

Pentominoes (continued)



4. See students' work.



Variation:

- Use a checkerboard for this variation and have students work in groups of two. Have each player choose a pentomino and place it anywhere on the checkerboard in turn. The first person who is unable to place one of the remaining pentominoes completely on the checkerboard loses. If all of the pentominoes are placed successfully, the player who puts down the last one wins.

In-Class Game

Pentominoes

Work in groups of four.

In your group, cut out and arrange the pentomino pieces below to form the shape that your teacher will describe to you. You may have to flip the pieces over to fit.

