## Math Mania

## Toothpick Puzzles

Solving puzzles increases your spatial reasoning. Sometimes the solution will be quite obvious. Other times, arriving at the solution will be more challenging. Here are three puzzles you can do with toothpicks, pretzel sticks, or other small sticks that are all the same length. Don't peek at page 2 until you are ready to check the answers.

1. Arrange 12 sticks as shown below. Move 4 sticks, make 3 small squares all the same size, with no leftover toothpicks:

2. Arrange 16 sticks as shown below. Move 2 sticks, make 4 small squares all the same size, with no leftover sticks:

3. Arrange 11 sticks as shown below. Move 1 stick so the house faces the opposite direction.


For an extra challenge, invent your own toothpick puzzle and see if someone else can solve it.

## Answers:

1. 


2.

3.


