King of the Castle

You need: digit cards 0−9, 1−3 classmates
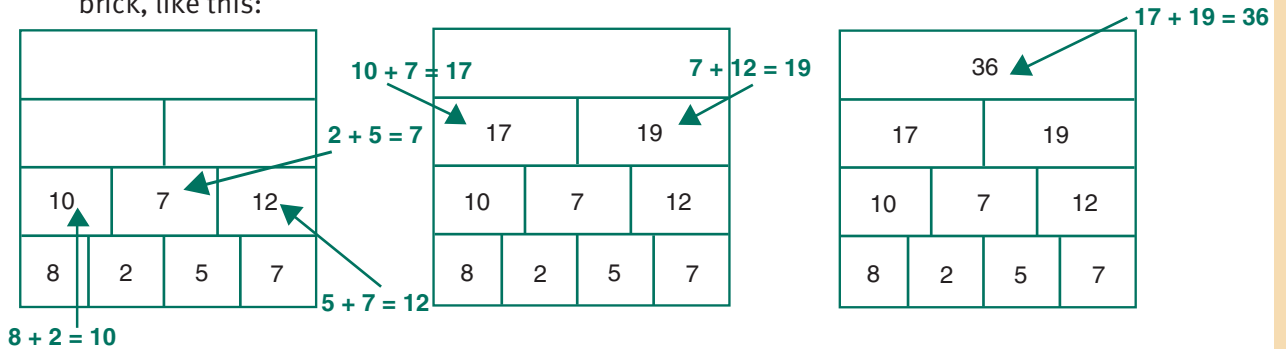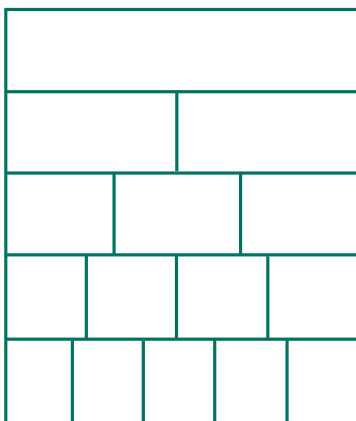
This is a game for 2−4 players.

HOW TO PLAY:

- Each player draws a castle.
- One player shuffles the digit cards and shows the top four cards to the other players.
- Each player writes the four top-card digits on the bottom layer of their castle. They can write them in any order, one digit on each brick.
- Each player climbs up the layers of their castle by adding the two numbers below each brick, like this:

$8 + 2 = 10$
$2 + 5 = 7$
$5 + 7 = 12$
$10 + 7 = 17$
$7 + 12 = 19$
$17 + 19 = 36$

- Players have 3 minutes to get the highest number they can in the top layer. Each player can make several different castles by trying the starting digits in different places on the bottom layer.
- The player with the highest number in the top layer is King of the Castle.

1. a. What strategy can you find for winning the game?
   b. How would you change your strategy if the lowest number in the top layer won?

2. Play a game of five-layer King of the Castle, with the highest number in the top layer winning. Use the digits in the speech bubble.

The digits to go in the bottom layer are 4, 5, 6, 7, and 8.

Where will you put each digit? Why?