



Tybee Island, Georgia

Cannonball Calculations

Fort Pulaski, just 10 minutes from Tybee Island, was the site of an important Civil War battle involving the newly invented rifled cannon. Launch your own cannonball competition with this math game that adds up to a ton of fun.

WHAT YOU NEED

2 or more players

1 Cannonball Calculations

game board for each player

2 Dice

Blank paper

Pencils

Crayons

WHAT YOU DO

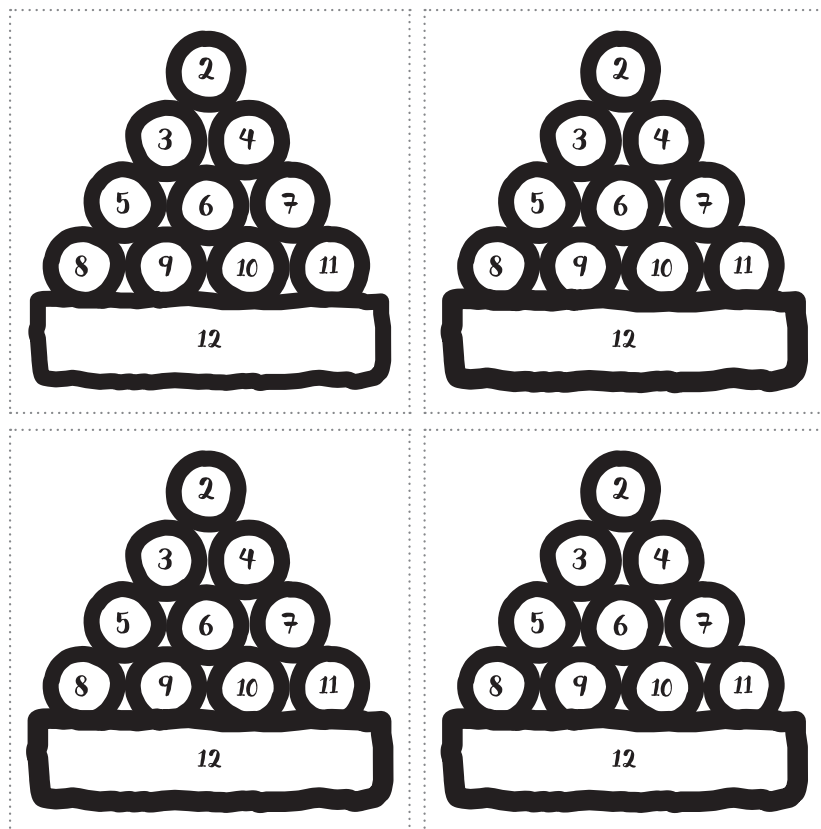
1. Give each player a game board. *(If you need more, you can either copy the template or draw additional game boards by hand.)*

2. The first player rolls the dice, then writes down and solves an addition equation using the numbers. For example, if he rolls a 1 and a 5, the equation would be $1 + 5 = 6$. That player then colors in the number 6 cannonball on his game board.

3. The next player does the same, coloring in the corresponding cannonball.

4. Players continue taking turns. If someone rolls a pair of numbers that add up to a cannonball he or she has already colored in, that player loses a turn.

5. The first player to color in all of the cannonballs wins the game.

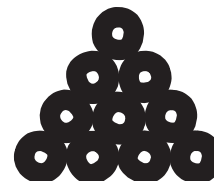


Battle Facts

In the spring of 1862, the Union Army set up cannons on Tybee Island that used a new, unproven technology. Confederate soldiers were at Fort Pulaski on a nearby island 2 1/2 miles away. They were not too worried because they did not think any gun could shoot that far with any force or accuracy. General Robert E. Lee said, "Colonel, they will make it pretty warm for you here with shells, but they cannot breach your walls at that distance."

It turns out that General Lee and his Confederate troops were wrong about the new cannon's ability. After 30 hours of battle, they had to surrender the fort to the Union forces.

1) The rifled cannons fired cannonballs that weighed about 30 pounds each. How many pounds does this stack of 10 cannonballs weigh?



$$30 \times 10 = ?$$

2) It took 6 soldiers to load and fire the cannons. If there were 5 cannons, how many soldiers were needed to operate them?

$$5 \times 6 = ?$$

3) The soldiers could reload the cannon every 4 minutes. About how many minutes would it take to fire a stack of 10 cannonballs?

$$4 \times 10 = ? \text{ minutes}$$

Bonus

How many cannonballs could be fired in 30 hours?

Hint: It takes 1 hour to fire 15 cannonballs.

