

Dots and Boxes

Topics: Logic, Counting, Shape Recognition, Strategy

Materials: Dot Paper, pencils or crayons

Common Core: K.CC.B.5, K.CC.C.6, K.G.B.5, 1.G.A.1, MP1, MP6, MP7

A game of squares and strategy that is easy to learn and hard to master.

Why We Love Dots and Boxes

This is a classic you may remember from childhood. The game is like a more sophisticated tic-tac-toe: fun and challenging for young kids, with simple counting and shape recognition practice built in, and connections to deeper mathematical strategy at play in the background. A perfect game for stations or ten extra minutes.

How to Play

Dots and Boxes is a game for two players, played on a small grid of dots. On your turn, add a vertical or horizontal edge between neighboring dots. If you complete a square, get one point and go again. Keep track of the score by coloring in your square, or writing your initial inside it.

Whoever has the most squares at the end wins.

Example Game

This graphic of a small game of Dots and Boxes from Wikipedia. Players A and B play a game in nine turns.

Notice that A's last turn consists of several moves, since every box completed gives A an extra move.

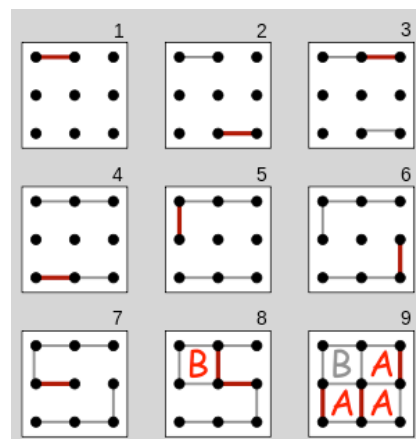


Image by of Wikipedia User Tiger66

Prompts and Questions

- Is it better to go first or second?
- Why did you win/lose your last game?
- Are draws possible?

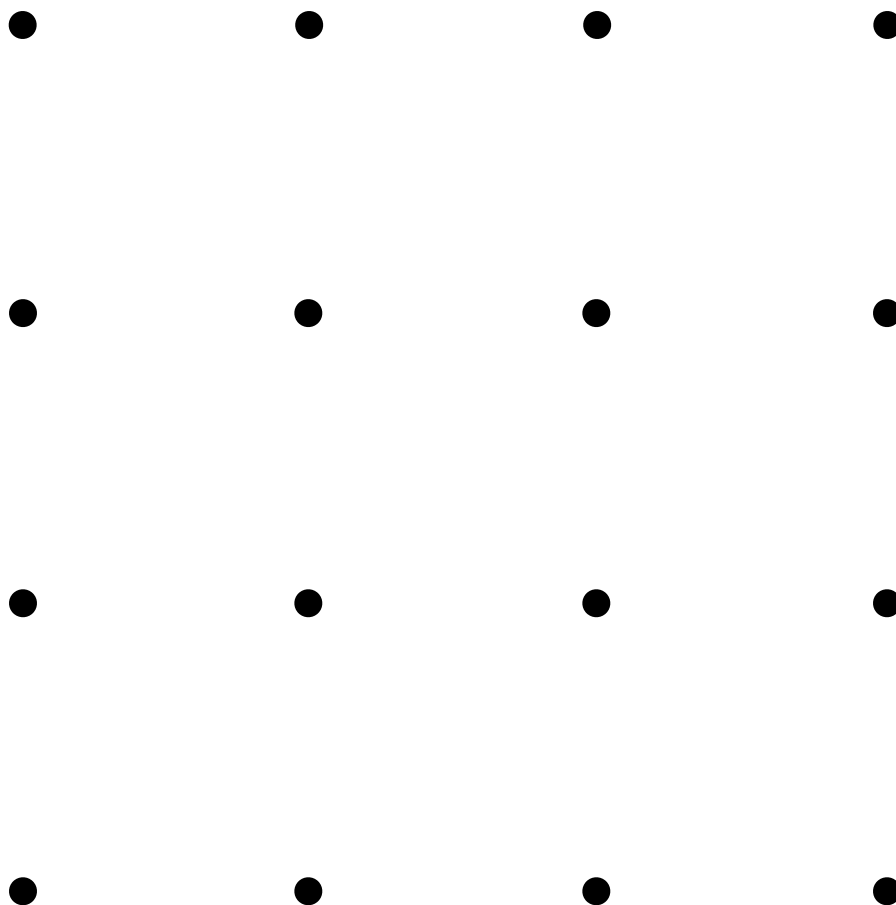
The Wrap

Ask students how many boxes there are altogether in a finished board. What are the possible scores? For example: 9 to 0, 8 to 1, etc. Can they come up with all the possible scores?

Tips for the Classroom

1. Small games are better, especially to start.
2. Play enough demonstration games with students so that the rules are clear.
3. Use different colored crayons or pencils while playing for a clearer game.
4. Placing square tiles on completed squares may help keep track of the score.

Dots and Boxes 3 by 3

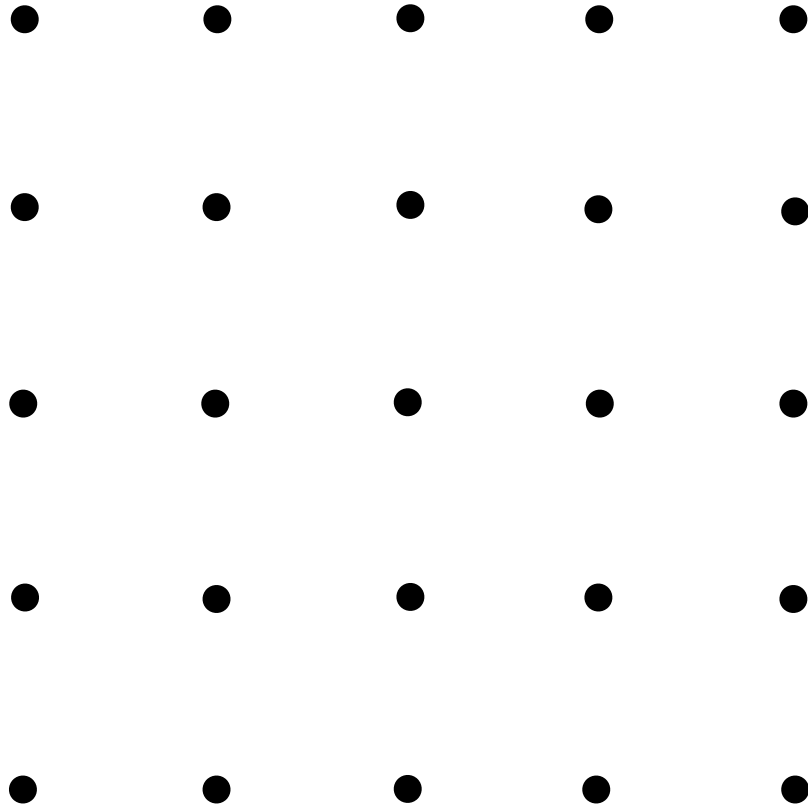


Dots and Boxes is a 2-player game.

On your turn, add a vertical or horizontal edge between dots. If you complete a square, get one point and go again. Keep track of the score by coloring in your square, or writing your initial inside it.

Whoever has the most squares at the end wins.

Dots and Boxes 4 by 4



Dots and Boxes is a 2-player game.

On your turn, add a vertical or horizontal edge between dots. If you complete a square, get one point and go again. Keep track of the score by coloring in your square, or writing your initial inside it.

Whoever has the most squares at the end wins.