

Another two-person game

- Again two players, A and B. A begins. The starting position has two piles of stones, with K and L stones.
- During a turn, the player can take 1 or 2 stones off in total, and these can be from the same pile, or from different piles.
- Who wins
 - $K=2$ and $L=1$?
 - $K=2$ and $L=2$?
 - $K=101$ and $L=47$?
- Figuring out who has a winning strategy is harder here, but still feasible. You'll learn how to do this, and prove you are correct, in this class.
- Spoiler: this can be solved using dynamic programming and the proof of correctness uses induction.