

Fifteen

Nine counters marked with the digits 1 to 9 are placed on the table. Alice and Bob alternately take one counter from the table. The winner is the first player to obtain, amongst his or her counters, three with the sum of exactly 15.

From Thinking Mathematically by J. Mason, L. Burton, and K. Stacey.

Fibonacci Nim

Two players, let's call them Alice and Bob, play against each other by taking turns removing objects from a pile. Alice goes first and she may remove as many objects as she wants, except for all of them. Bob can then remove up to twice the number of objects Alice has just removed. Now it is Alice's turn, and she can remove up to twice the number of objects Bob has just removed. And so on, each time a player can remove up to twice the number of objects the other player removed in the preceding turn. The player that removes the last object wins.