Learn how binary numbers work by playing the same game Hopper and Eni play in **Secret Coders Book 1!**

1. Start with seven pennies.

2. Fit all seven pennies into the boxes, but there's a catch! Every column of boxes has to be either completely full or completely empty. No half-filled columns.

3. When you're done, write a zero on the line beneath each empty column. Write a one on the line beneath each empty column.

4. The result is seven as a binary number! (Turn this page upside down to see the answer.)

5. Try it with other numbers too! This game will work with any number that's fifteen or smaller.

If you want to use numbers bigger than fifteen, you'll need to add more columns to the left. (And you'll need bigger paper!) The next column will have 16 boxes, the one after that 32, and so on. Each column will have twice as many boxes as the column to its right.

In binary, seven is 0111