

## Binary Bracelets

Goal: Binary code allows computers to store information. This activity introduces students to the binary number system and allows students to gain an understanding of how computers work.

### Materials -

- pipe cleaners
- beads (2+ colors)
- binary decoder key

### Procedure -

1. Select 2 different colored beads. Assign each color either 0 or 1
2. Use the decoder key to translate your initials into binary code.
3. Put beads on the pipe cleaner, according to the binary code translated
  - a. *\*optional: use a different colored bead as a spacer between letters*
4. When finished, tie off your pipe cleaner

☆ Explanation: Each letter can be represented by a different binary number. When looking at the key, students may even notice a pattern when looking at the letters in alphabetical order.

### Image(s) -

A	■□■□ ■■■□	N	■□■□ □□■□
B	■□■□ ■■■■	O	■□■□ □□□□
C	■□■□ ■■■□	P	■□■□ ■■■■
D	■□■□ ■■■■	Q	■□■□ ■■■□
E	■□■□ ■■■■	R	■□■□ ■■■■
F	■□■□ ■■■■	S	■□■□ ■■■■
G	■□■□ ■■■□	T	■□■□ ■■■■
H	■□■□ □■■■	U	■□■□ ■■■■
I	■□■□ □■■■	V	■□■□ ■■■■
J	■□■□ □■■■	W	■□■□ ■■■■
K	■□■□ □■■■	X	■□■□ □■■■
L	■□■□ □■■■	Y	■□■□ □■■■
M	■□■□ □■■■	Z	■□■□ □■■■

