## Friscó Library

## Activities at Home

## Make your own binary code bracelet

Binary code is any code that uses 2 symbols to represent information. One of the most common binary codes is the American standard code for information interchange (ASCII). This code uses 0 's and 1's to represent text in computers, but binary code doesn't have to be virtual. Let's use binary code to make a bracelet with your initials!

## Supplies:

- Sting or yarn
- 3 different colors of beads


## Instructions:

1. Decide which color bead will represent 0 , which wil1 represent 1, and which will be the spacer.

2. Use the ASCII alphabet bellow to write out your initials in binary code

## F. 1000110 <br> P- 1010000 <br> L-1001100

3. Tie a large knot at the end of the string, and add the beads on the string in the order of the code. Don't forget to put a spacer between each letter.

4. Tie the two ends together and you're done! what else could you spell out in binary code? Try writing a secret message to a friend and see if they can decode it.

## ASCII BINARY ALPHABET

| A | 1000001 | N | 1001110 |
| :---: | :---: | :---: | :---: |
| B | 1000010 | O | 1001111 |
| C | 1000011 | P | 1010000 |
| D | 1000100 | Q | 1010001 |
| E | 1000101 | R | 1010010 |
| F | 1000110 | S | 1010011 |
| G | 1000111 | T | 1010100 |
| H | 1001000 | U | 1010101 |
| I | 1001001 | V | 1010110 |
| J | 1001010 | W | 1010111 |
| K | 1001011 | X | 1010111 |
| L | 1001100 | Y | 1011001 |
| M | 1001101 | Z | 1011010 |

