## Coding Bracelets

## Materials：

－Beads in various colors
－Yarn or string
－Binary code key（bottom of page）

## Procedure：

1．Look at the code key below．


2．Come up with something you want to code：your name，a phrase，a hashtag，etc．
3．String the beads on the yarn or string to＂spell＂out your code．Tie the ends to make your bracelet．Want a longer code？Make a necklace instead！

| Letter | Binary |  |
| :---: | :---: | :---: |
| A | － | － |
| B | －$\square$ ■ | － |
| C | － | － |
| D | －［■！ | －ロロ！ |
| E | － | － |
| F | －$\square$ ■ | － |
| G | － | － |
| H | －$\square_{\text {■ }}$ | － |
| I | － | － |
| J | －$\square$ ■ | －ロロ■ |
| K | － | $\square \square \square$ |
| L | －$\square$ ■ | ロロ■■ |
| M | －$\square_{\text {■ }}$ | － |


| Letter | Binary |  |
| :---: | :---: | :---: |
| N | － | － |
| O | － | 맴 |
| P | －$\square$－ | － |
| Q | －$\square$－ | ■■■ |
| R | － | －$\square$－ |
| S | －－－ | － |
| T | －－－ | － |
| U | －¢－ | －$\square$－ |
| V | － | － |
| W | －¢－ | － |
| X | －－－ | －ロロロ |
| Y | －$\square$－ | － |
| Z | －－－ | －$\square$ ■ |

What is binary code？
When is the letter A not the letter A？Well，computers don＇t use the letter A．They use the eight－character binary number O 1000001 to represent A ．Computers transport，calculate， and translate binary numbers because computer hardware circuits only have two electrical states，on or off．These two states can be represented as zero（off）or one（on）．All letters of the alphabet，numbers，and symbols are converted to eight－character binary numbers as you work with them in software on your computer．

