# Intergalactic Connections

## Activity 1: Binary Code Friendship Bracelets

Binary code represents text, numbers, and other information using 0s and 1s. Use different color or different shaped/sized beads to create these coded message friendship bracelets. You can make these with your friends or make some to give to your friends.

### Supplies

* beads of two different colors, shapes, or sizes (Dollar Tree has lots of beads available in-store or online)
* string or elastic string
* plate or small bowls (to hold beads while working)
* washcloth or towel

### Instructions

1. Lay out a washcloth or towel where you will be working. This will catch any beads you accidentally drop and keep them from sliding or rolling away.
2. Separate the beads by shape, color, or size onto a plate or into separate small bowls.
3. Cut a length of string an inch or two longer than the circumference of your wrist. Measure by wrapping the string around your wrist until one end meets the string, then cut the string an inch or two past that point so you have room to tie it when finished.
4. Decide which beads are going to 0s and which are going to be 1s.
5. Thread the beads in the appropriate pattern to make letters and words. How many words or letters you choose will depend on the length of your string.
6. When you’ve finished adding beads, tie off your bracelet.

Wear it with your friends.

### Letters in Binary Code

A 01000001

B 01000010

C 01000011

D 01000100

E 01000101

F 01000110

G 01000111

H 01001000

I 01001001

J 01001010

K 01001011

L 01001100

M 01001101

N 01001110

O 01001111

P 01010000

Q 01010001

R 01010010

S 01010011

T 01010100

U 01010101

V 01010110

W 01010111

X 01011000

Y 01011001

Z 01011010