



Binary Code Bracelets/Keychains

Supplies provided: cord, beads, keychain ring

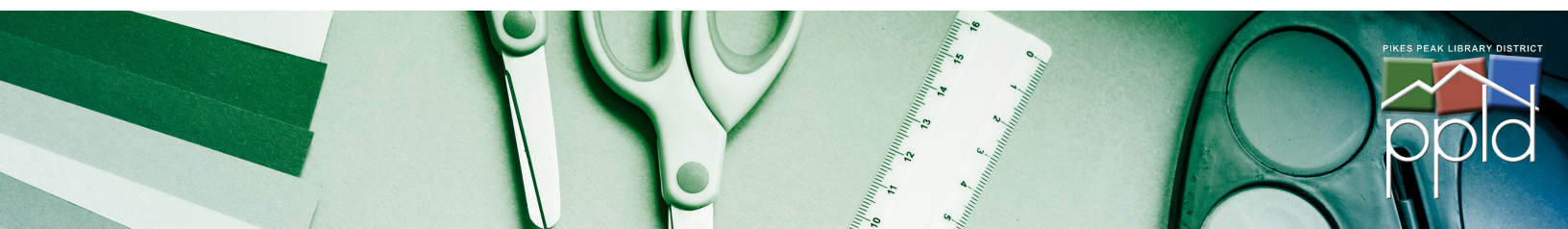
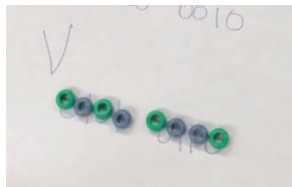
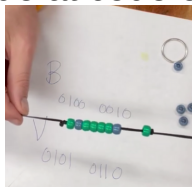
You provide: scissors

Instructions:



1. Write down the initials of your name and decode them using the binary code key provided.
2. Use blue and green beads to represent 0 and 1 - one color will represent the number zero, and the other color will represent the number one.
3. Tie a double knot at the end of your cord.
4. Put the beads for your first initial on the cord.
5. Tie another double knot to separate the initials.
6. Put the beads for your second initial on the cord.
7. Tie a double knot.
8. Use the remaining cord to either tie the beads around your wrist as a bracelet, or affix the cord to the keychain ring. Cut off any access cord. Enjoy your binary bracelet or keychain!
9. Find a video with instructions for this project and information about binary code by using the QR code at the top to head to the Tween Twist playlist. You'll also find other amazing projects for tweens and younger teens!

*This project was created in honor of Hour of Code. Learn more about Hour of Code at code.org!



Letter	Binary	Letter	Binary	Letter	Binary	Letter	Binary
A	01000001	G	01000111	N	01001110	U	01010101
B	01000010	H	01001000	O	01001111	V	01010110
C	01000011	I	01001001	P	01010000	W	01010111
D	01000100	J	01001010	Q	01010001	X	01011000
E	01000101	K	01001011	R	01010010	Y	01011001
F	01000110	L	01001100	S	01010011	Z	01011010
		M	01001101	T	01010100		



Unplugged

Binary Bracelets

Binary Decoder Key



A	■□■ ■■□
B	■□■ ■■□
C	■□■ ■■□
D	■□■ ■□■
E	■□■ ■□□
F	■□■ ■□□
G	■□■ ■□□
H	■□■ □■■■
I	■□■ □■■□
J	■□■ □■□■
K	■□■ □■□□
L	■□■ □□■■
M	■□■ □□■□

N	■□■ □□□■
O	■□■ □□□□
P	■□□ ■■■■
Q	■□□ ■■■□
R	■□□ ■■□■
S	■□□ ■■□□
T	■□□ ■□■■
U	■□□ ■□■□
V	■□□ ■□□■
W	■□□ ■□□□
X	■□□ □■■■
Y	■□□ □■■□
Z	■□□ □■□■

Binary Challenge Magical Edition: Decode this Quote!

Using the two binary decoder keys, decode this quote. Each set of codes will create a different word. The code labelled "1" corresponds to the first word, the code labelled "2" corresponds to the second word, and so on and so forth. By the end, you should have a quote! Write the quote on the last page.

1. 01001010

■□■□ ■□■□

01010011

01010100

2. 01000010

■□■□ ■□■□

01000011

■□■□ ■□■□

■□■□ ■□■□

01010011

■□■□ ■□■□

3. 01011001

■□■□ □□□□

■□■□ ■□■□

4. 01000100

■□■□ □□□□

01001110

01010100

5. 01010011

■□■□ ■□■□

■□■□ ■□■□

6. 01010011

■□■□ □□□□

01001101

■□■□ ■□■□

01010100

01001000

■□■□ □□□□

01001110

01000111

7. 01000100

■□■□ □□□□

■□■□ ■□■□

01010011

01001110

01010100

8. 01001101

■□■□ ■□■□

■□■□ ■□■□

01001110

9. ■□■□ □□□□

01010100

10. ■□■□ □□□□

01010011

01001110

01010100

11. 01010100

01001000

■□■□ ■□■□

01010010

■□■□ ■□■□

12. 01010011

■□■□ □□□□

01001101

■□■□ ■□■□

13. ■□■□ □□□□

01000110

14. 01010100

01001000

■□■□ ■□■□

15. 01001101

■□■□ □□□□

01010011

01010100

16. 01010111

■□■□ □□□□

01001110

01000100

■□■□ ■□■□

01010010

01000110

■□■□ ■□■□

01001100

17. 01010100

01001000

■□■□ □□□□

01001110

01000111

01010011

18. ■□■□ □□□□

01001110

19. 01010100

01001000

■□■□ ■□■□

20. 01010111
■□■■ □□□□
01010010
01001100
01000100

21. ■□■■ ■■■□
01010010
■□■■ ■□□□

22. ■□■■ □■■□
01001110
01010110
■□■■ □■■□
01010011
■□■■ □■■□
01000010
01001100
■□■■ ■□□□

23. 01010100
01010010
■□□□ ■□□□
01010011
01010100
■□■■ □■■□
01001110
01000111

24. ■□■■ □■■□
01001110

25. ■□■■ □■■□
01001110
01010110
■□■■ □■■□
01010011
■□■■ □■■□
01000010
01001100
■□■■ ■□□□

26. 01010100
01001000
■□■■ □■■□
01001110
01000111
01010011

27. 01001101
■□■■ ■■■□
01001011
■□■■ ■□□□
01010011

28. 01010100
01001000
■□■■ ■□□□
01001101

29. 01001101
■□■■ □□□□
01010010
■□■■ ■□□□

30. 01010000
■□■■ □□□□
01010111
■□■■ ■□□□
01010010
01000110
■□□□ ■□□□
01001100

31. ■□■■ ■■■□
01001110
01000100

32. 01010111
■□■■ □□□□
01001110
01000100
01010010
■□■■ □□□□
■□□□ ■□□□
01010011

“

_____ , _____ , _____ .

_____”

And for a bonus question, can you write in binary the name of the book that this quote came from?

Answer Key:

Just because you don't see something doesn't mean it isn't there. Some of the most wonderful things in the world are invisible. Trusting in invisible things makes them more powerful and wondrous.

From *The Girl Who Drank the Moon* by Kelly Barnhill.