Coding Fun Facts!

Did you know the first computer programmer was a woman? Her name was Ada Lovelace and she was born more than 200 years ago! Ada helped create a machine that could do math, programmed with a code. This was the first computer program.

Did you know that we say "debugging" because a woman found a moth in a computer? Grace Hopper helped build the first computer, and also helped coin the term "debugging." Debugging is a strategy we use today in computer science when we find or fix errors in code.

Did you know that a woman created the code that put men on the moon? Margaret Hamilton led teams of scientists at NASA that guided the Apollo moon landings. She wrote a program that sent a signal to the crew if a problem occurred with the computers on board. Apollo 11's computer overloaded and Margaret's program helped them land safely on the moon!

Code Your Initials

Using the Decoder Key, code your initials.
Use one row for each letter.
Fill in the code using two of your favorite colors!

FIRST

MIDDLE

LAST

Decoder Key

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	■□■□	□■□■

girl scouts

{Creative Coding}

Code is the language that computer scientists create and use to tell computers what to do. There are hundreds of different programming languages-these activities use binary code.

What's the secret?

Use the Decoder Key to reveal the message

1	■□■■	■■□□
2	■□■■	□□□□
3	■□■■	■□■■
4	■□■■	□■■□
5	■□■■	□□□■
6	■□■■	■□□□
7	■□■■	□■■□
8	■□■□	■■□□
9	■□■■	■■□□
10	■□■■	□□□□
11	■□■■	□□□□
12	■□■■	□□■■

Write the code here.
Use this secret code at **www.girlscouts.org/parade**
to reveal a secret message.

Binary coding: This is the simplest form of coding. It uses a series of 0's and 1's to represent a letter or other number, for example A = 1011 1110. This is the code that is used to spell out instructions for computers and video games to run.

Want to learn more about Girl Scouts?
Go to: **www.girlscouts.org**

Color to reveal the secret image

0= Light Color
1= Dark Color

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