


Binary Code

What you need:

- Beads – 3 different colours
- String/ twine which fits through beads
- Paper and pencil
- Scissors
- Binary code sheet

What to do:

- Separate your beads into three piles. One pile is white square, one pile is blue square, and third pile is 'stop' beads
- Decide on what letters you want to code. Your initials are good so may be UHI.
- Look at the code sheets, find you letters and write down the code i.e. U = 
- Pick up string and tie a big knot, now thread the bead on to string in the same sequence laid out in your letters.
- Between each letter add 'stop bead'.
- Tie at end
- Take your code to parent or friend and ask them to break the code – remember to give them the binary key.
- Is it difficult? Remember to make sure you give them the line of beads with first letter on left, ending with a 'stop bead'.

Binary Code 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	■□□ □■□ ■

The Science

Computers use binary to store information. Imagine binary as a language that a computer can understand there are only two letters in this language, 1 and 0. Each alphabetic character needs a combination of eight beads