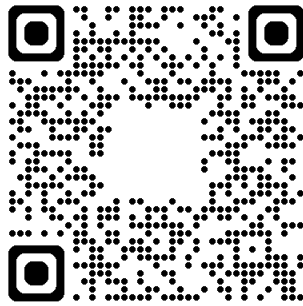


Student Activity 9: Patterns that Contain Information

Can a pattern of black and white or of sound give you information?

You have probably seen QR codes that are made up of black and white areas. Each QR code is unique. This means that every one is different.

QR stands for Quick Response. That means that the information can be quickly detected and identified. Here is a sample QR code. The black squares in three corners define the area and orientation of the QR code so the camera knows where the edges are.



Did you know that the camera that is built into your computer may be able to scan QR codes and bar codes for projects? Just point Flexi-Scope at the code and use the focus ring to get it clear. If the camera recognizes the code, it will give you a link to go to the website that has more information.

Can you think of other patterns you can use to communicate? How about Morse code?

A	•—	H	••••	O	— — —	V	•••—
B	—•••	I	••	P	•— — •	W	•— — —
C	—•—•	J	•— — —	Q	— — • —	X	—••—
D	—••	K	—•—	R	•—•	Y	—•— —
E	•	L	•—••	S	•••	Z	— — ••
F	••—•	M	— —	T	—		
G	— — •	N	—•	U	••—		

A dot, called a dit, means a short sound, a dash, or dah, means a longer sound.

A famous message that sailors sent when they needed help was this:

dit dit dit dah dah dah dit dit dit

Can you figure out the message?

Can you send a message to a friend using Morse code?

(This has nothing to do with Flexi-Scope, but is fun to do!)