Sound Codes Game

Aim:
In this game teams will create a code, using your instrument, to communicate a message about what chip colors their partner has.

Materials:
Instrument    Chips    Book or Backpack

Step 1: Practice

In your group, use your instrument to try and create different sounds.

What can you feel as you create these sounds?

- Make a loud sound and then a soft sound. Draw the waves for both sounds. What is different about them? Try to think of what we discussed on the last activity.

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<th>Loud</th>
<th>Soft</th>
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Difference:
Step 2: Color of Chips

_ Explain how you communicated different colors to your partner.

**Explanation:**

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Step 3: Number of Chips

_ What did you do to communicate the different numbers? How was your code different this time?

**Explanation:**

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Step 4: Color and Number of Chips

_ How was this code more difficult to create? What are some things you did in your code to note the color or number?

**Explanation:**

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Step 5: Competition

After the first competition, what is something you will change to make your code faster or more accurate?

Change:

Did you change improve your accuracy or speed? Explain.

Explanation:
Discussion Questions

1. What was the hardest part of sending codes to your partner? Why? What about receiving codes?

2. How did your team’s codes change from one round to the next? Did they become simpler or more complicated over the course of the game? Why?

3. Did all of the teams use the same code? What are some differences between the codes each team used?

4. Were some codes more successful than others? What made those codes work so well? Which codes were the easiest for the receiver to understand? Which codes could be sent the fastest?

5. Computers send each other information – like emails, music, or pictures – by sending a bunch of 0’s and 1’s from one computer to the next. So 01000001 would mean something different than 01100001. How is that similar to the codes you used? How is it different?