Objective: Students will create and use a specialized code. Students will learn and use Braille.

*Vocabulary:  ALPHABET  BRAILLE  ENCODE  SUBSTITUTION  SYMBOLS


Preparation: Posters and handouts of the Braille alphabet should be available. (Braille sheet included.)

Discussion: The instructor will lead a general group discussion on the use of written language. A written language is a series of symbols representing sounds of the spoken language. These symbols can be changed for a variety of reasons: to encode a secret message for private communications or a series of dots for the sight impaired. The instructor will demonstrate the alphabet in Braille and discuss the concept of substituting raised dots for letters. Braille uses 26 letters, the same as our written alphabet does, but it uses more symbols to represent different usages of letters.

Activity 1: Students will be assigned a letter in the alphabet to build in order to create a class abecedary. The instructor will encourage the class to be creative in developing letters. Should time permit, students can build the name of the school.

Activity 2: Students will be challenged to create a sentence in Braille using bricks and building bricks.

Activity 3: Students will be challenged to develop their own secret code using bricks. Students will be required to work in pairs and will record their code with paper and pencil. After a substitution code is agreed upon, one partner will send a sentence to the other for decoding.

Activity 4: Students will write a short essay describing the importance of written language.

*Use the PCS Edventures Term Browser, http://www.edventures.com, or a dictionary to find vocabulary definitions.
Communication

#6

CREATE YOUR OWN CODE

Required Materials:

<table>
<thead>
<tr>
<th>2x2 bricks</th>
<th>Braille sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 8x16 brick</td>
<td></td>
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</table>

1. Braille is a language used by blind people. Review the sheet of braille your instructor has provided for you.

2. By using 2x2 bricks, an 8x16 building brick, and your braille sheet, create the letter P on your building brick. Close your eyes and run your hand over the bumps.

3. Braille is read from left to right, the same way that words are read in English.

4. Make a braille letter on your building brick. Find a partner and sit across from each other.

5. Test each other on different letters. Try first with your eyes open, and then for a real challenge, close your eyes!
Create Your Own Code

Multiple Choice:

1. When you encode something you...
   - Change it into symbols
   - Make its hair look nice
   - Program an alphabet into a computer
   - Use Braille

2. How many letters are there in the Braille alphabet?
   - 26
   - 42
   - 15
   - 170

3. To make code, you create a(n) __________ for letters?
   - Series of raised bumps
   - Encode
   - Substitution
   - Official language

Questions to Ponder:

(Use these questions as a starting point for your journal entry.)

1. In what type of situations would using code be useful?
2. What is a symbol?
3. Describe three things you know about Braille.

Journal Entry:

________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________

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________________________________________________________________________________________________________________________

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________________________________________________________________________________________________________________________

Name: _______________________________________   Date: _____________________

Assessment

Vocabulary Review:

ALPHABET          BRaille            ENCODE

SUBSTITUTION      SYMBOLS

Grade

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