U1Ch1L9_Lossless Text Compression *(10 pts.)*

Purpose: Students will analyze patterns in data to determine compression strategies and create lossless compressions of text files.

Vocabulary: Lossless

Video: Lossy & Lossless Video (lossy in second half – go to 00:35 -1:22)

Activity: Handout "Decode This Message."
- Explain how this is Lossless.

Activity: Go the Lossless Compression App Lab U1Ch1L9.
- Select a song/poem from the menu.
- Look for patterns (repeated words) in the text. Enter the patterns you see in the song/poem into the dictionary on the right. As you type entries into the dictionary, the symbol for the entry is inserted into the text in place of the pattern.
- Develop a strategy. (*After each song/poem that you compress, you will be asked what your strategy is*).
- 5 minute limit...Then have students compare results!

Journal: State your Compression Percentage and any changes to your strategy next to each song/poem below. *(10 pts.)*.

"So wake me up when it's all over" – Compression Percentage: _____
Strategy:_____

_____

"I Need a Dollar" – Compression Percentage: _____
Strategy:_____

_____

"The Man" – Compression Percentage: _____
Strategy:_____

_____

"Pitter Patter" – Compression Percentage: _____
Strategy:_____

_____

"A tutor who tooted the flute" – Compression Percentage: _____
Strategy:_____

_____

_____

"She sells sea shells on the sea shore." – Compression Percentage: ____
Strategy:_____

_____

_____

"I know an old lady" – Compression Percentage: _____
Strategy:_____

_____