Name(s)_____ Period _____ Date _____

Activity Guide - Text Compression Heuristics

This meant as a follow-on to the text compression activity.

Vocabulary
Heuristic: a problem solving approach (typically an algorithm) to find a satisfactory solution where finding an optimal or exact solution is impractical or impossible.

Develop a Heuristic
Continue working on compressing your poem using the Text Compression Widget. As you do so, develop a set of rules, or a "heuristic" that generally seems to provide good results.

- **Record your heuristic** as a list of steps that someone else unfamiliar with the problem could follow and still end up with decent compression.
- **Trade your heuristics with another group.** Are they clear and specific enough that you always know what to do? If not, provide feedback to one another and improve your heuristics to provide clearer instructions.
- Using another group's heuristic, attempt to compress one or more of the poems in the tool. Record the amount of compression you achieve.

Poem	Compression Rate

Record Your Conclusions

1. Do you think it's possible to describe (or write) a specific set of instructions that a person could follow that would always result in better text compression than your heuristic? Why or why not?

2. Is there a way to know that a compressed piece of text is compressed the most possible? If yes, describe how you could determine it. If no, why not?