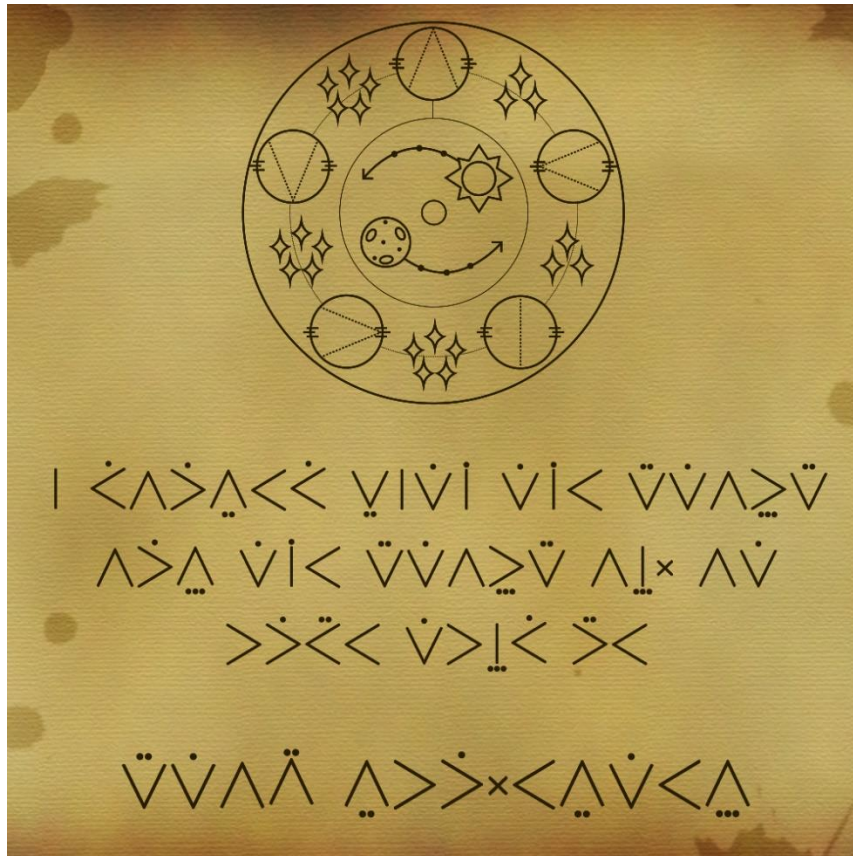# The Vowel Cipher

This cipher is based around a fun fact about the English alphabet: each letter in the alphabet is at three spaces or less away from a vowel. You don't have to take my word for it; you can see if you lay out the letters and bold the vowels, as shown below. Note that for this cipher, the alphabet loops, so Z is one space away from A, just in the opposite direction.

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

As shown by this alphabet layout, each consonant is, at maximum, three spaces away from a vowel. For some examples, the letter B is one space ahead of A, M is two spaces backwards from O, and R is both three spaces ahead of O and three spaces behind U. This brings up an important part of the cipher: a letter may have two different symbols that are associated with it if it's within three spaces of two different vowels.

The cipher's key is entirely contained in the circular image above the text. Starting from the top and going clockwise, each of the large circles represents a vowel: A, E, I, O, and U. Between each circle are a number of stars, which indicate how many letters are between each vowel. There are three letters between A and E, three between E and I, five between I and O, five between O and U, and five between U and A.

The central image of the sun and moon is what brings consonants into the mix. The three dots on the arrows next to the sun and moon represent the up to three dots that can appear above or below one of the vowel letters. If the dots are on top of a letter, like the sun is on top of the central circle, those indicate steps *backward* from the vowel character being used, shown by the sun's arrow going backwards. Dots on the bottom of a character, like the moon being below the central circle, indicate steps *forward* from the used vowel. Each arrow only having three dots is a clue that there can only be a maximum of three dots above or below a vowel, or in other words, each letter used in the cipher is three or less spaces away from a vowel. The three lines on either side of each vowel symbol's circle are a second clue that this is the case.

With that information, you can start by marking off each vowel, which are symbols without dots. When a symbol has dots, you take the vowel that the symbol represents and count either forward that number of spaces if the dots are below, or count backwards if the dots are above. Doing this for every letter will reveal the message.

There are two things about this cipher that are not directly stated through the graphics, but are clear once the message is being solved. The first is the use of the symbol X. This symbol is used when there are two of the same letter directly next to each other. Instead of repeating the same symbol, an X is used in place of the second character. If you are using the font, this is done by using the ` key. The second is a stylistic choice: when letters have multiple symbols that can be used to represent them, symbols are chosen so that the same vowel does not appear multiple times in a row. If you are using the font, you can change between the two valid options of a letter by using capital letters or lowercase letters. If a letter only has one valid symbol, both the capital and lowercase letter will show the same symbol.