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## Rocks and Minerals CRYPTOGRAM

Rules for solving a cryptogram: Every letter of the alphabet is exchanged for one alternative letter. This one-for-one swap holds for the whole message. For example,
"D BQ YKF LQBJ YFLY CWM WA YKF NGBLL"
decodes as:
I AM THE SMARTEST KID IN THE CLASS

## Hints for solving a cryptogram:

1.If you have an idea what the message is about, you can make some clever guesses as to what some of the words might be.
2. Single letters are "I" or "A". You can often tell which by its position in a sentence.
3. Look for a three letter word that keeps recurring. It might be "THE" or "AND"
4. Look for double letters. There are only a small number of possibilities, (LL EE SS OO TT FF RR NN PP CC in that order) and their position in the word often makes it easier to guess which letter is being doubled.
5. Don't be put off by a long message. The longer it is, the easier it is to solve, as more clues are given. Also, the longer the message, the letters that appear most often are likely to be E, then T, A, O, N, R, I and S.

Here is your Rocks and Minerals Cryptogram.
There are TWO sentences in this message. Apostrophes and full stops are shown normally. Please write your decoded message in the squares.


| $\mathbf{M}$ | $\mathbf{N}$ | $\mathbf{U}$ | $\mathbf{Y}$ | $\mathbf{F}$ | $\mathbf{M}$ | $\mathbf{L}$ | $\mathbf{I}$ | $\mathbf{V}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |



## SOLUTION

"Minerals are chemicals that occur naturally in the earth's crust. Rocks are mixtures of minerals"

