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## CHEMISTRY CRYPTOGRAMS

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 LQBJYFL Y 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. In this case, words like "CHEMISTRY", "ATOM" and "MOLECULE", are pretty likely to be found somewhere among these six cryptograms.
2. Single letters must be "I" or "A". You can often tell which one 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 are your Chemistry Cryptograms:
Each cryptogram has a different letter-substitution code.
The spaces are spaces between words.
Grey squares represent full stops at the end of each sentence.
Please write your decoded message in the squares.

## Cryptogram 1:



Cryptogram 2:



Cryptogram 3:


J $\quad \mathbf{K} \quad \mathbf{I} \quad \mathbf{I}$





Cryptogram 4:







## Cryptogram 5:


U JG O M H $\mathbf{F} \mathbf{F} \mathbf{P} \mathbf{M} \mathbf{S} \mathbf{V} \mathbf{V} \mathbf{J} \mathbf{J} \mathbf{J} \mathbf{G} \mathbf{O} \mathbf{O} \mathbf{J} \mathbf{G} \mathbf{M}$
M Q M OM S V T $\quad \mathbf{E} \mathbf{J} \mathbf{N} \mathbf{S} \quad \mathbf{V} \mathbf{J} \mathbf{W} \mathbf{M} \mathbf{V} \mathbf{P} \mathbf{M} \mathbf{G}$.



## Cryptogram 6:



## SOLUTIONS

1. "Chemistry is the study of matter. Anything that can be weighed and that takes up space is matter"
2. "All Matter is made up of atoms. Atoms are tiny particles that can not be divided into simpler particles. "
3. "There are ninety two different kinds of atom found in nature. Any substance that consists of only one kind of atom is called an element."
4. "When two or more atoms are joined together a molecule is formed. For example a water molecule has two hydrogen atoms and one oxygen atom in it."
5. "Chemical compounds are formed when two or more elements join together. For example water is a compound of hydrogen and oxygen."
6. "The study of compounds based on carbon atoms is called organic chemistry."
