Codebreaking Challenges

Use the 'Codebreaking – Decryption Tools' to help you with Challenges 1-3.

Challenge 1:

The following message has been created with a simple Caeser cipher.
Can you crack it?

n v c t f d v k f t f d g l k z e x

Challenge 2:

The message below was encrypted using a substitution key.
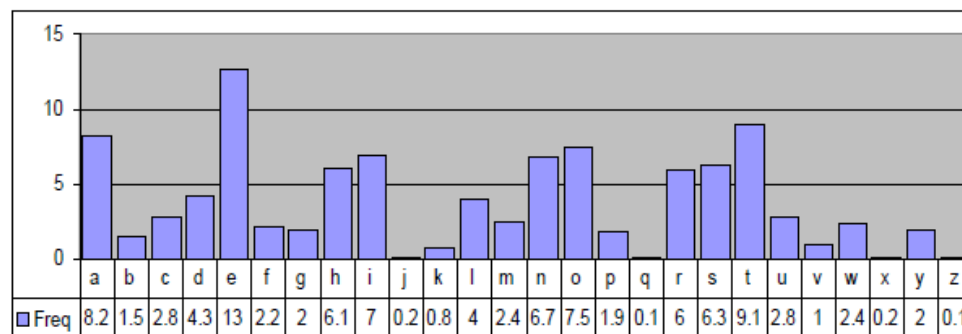The key has been uncovered. Can you use it to decipher the code?

b l a z i v z k l g y z m z m z

Substitution key

a	b	c	d	e	f	g	h	i	j	k	l	m
u	y	c	q	j	s	p	k	r	m	t	o	n

n	o	p	q	r	s	t	u	v	w	x	y	z
z	l	d	i	v	x	f	g	e	h	w	b	a

Challenge 3:

The message below was encrypted using a substitution key.
We do not know the key. We may be able to decipher the code by using frequency analysis.
Look at the graph – in English the most common letter is **e** followed by **t** and **a**.
Can you use this information to decrypt this code?

	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
Freq	8.2	1.5	2.8	4.3	13	2.2	2	6.1	7	0.2	0.8	4	2.4	6.7	7.5	1.9	0.1	6	6.3	9.1	2.8	1	2.4	0.2	2	0.1

h o h f y a j u f g r h i h q j u y u i x l u m f t t j u f g w h y x t w h y u p u h f

x t r h i x u g x o c u f v o a t f y u h o u f y x t s t e t o m l w t f y m v y x t p m l a y t j

x t u i r u s t o c j t p m g f u i t s h i y x t v h y x t j m v p m w l a y t j i p u t f p t

y a j u f g u i h y j a t g t f u a i