## nrich

## **Substitution Cipher**

In the coded text below, every letter in the original message was switched with another letter. Find out which are the most (and least) common letters used in English to help you crack this coded message:

Vfj Uzyj fxc pjjw nzkrgwi tjkl fxkc xyy vfj uzkwgwi, qbkgwi-dyjxwgwi fgq ygvvyj fzuj. Hgkav navf pkzzua, vfjw navf cmavjka; vfjw zw yxccjka xwc avjba xwc dfxgkq, ngvf x pkmqf xwc x bxgy zh nfgvjnxqf; vgyy fj fxc cmqv gw fgq vfkzxv xwc jljq, xwc gbyxgfjq zh nfqvjnxqf xyy ztjk fqq pyxdr hmk, xwc xw xdfgwi pxdr xwc njxkl xkuq. Qbkgwi nxq uztgwi gw vfj xgk xpztj xwc gw vfj jxkvf pjyzn xwc xkzmwc fgu, bjwjvkxvgwi jtjw fgq cxkr xwc yznyl ygvvyj fzmqj ngvf gvq qbgkgv zh cgtgwj cgqdzwvjwv xwc yzwigwi. Gv nxq quxyy nzwcjk, vfjw, vfxv fj gmccjwyl hymwi cznw fgg pkmgf zw vfj hyzzk, gxgc 'Pzvfjk!' xwc 'Z pyzn!' xwc xygz 'Fxwi qbkgwi-dyjxwgwi!' xwc pzyvjc zmv zh vfj fzmqj ngvfzmv jtjw nxgvgwi vz bmv zw fgg dzxv. Qzujvfgwi mb xpztj nxg dxyygwi fau gubikazmayl, xwc fi uxcj hzk vfj avjib yavvyj vmwwjy nfadf xwanjkje aw fag dxaj vz vfj ixtjyje dxkkaxij-ckatj znwje pl xwauxya nfzaj kjagejwdja xkj wjxkjk vz vfj qmw xwc xgk. Qz fj qdkxbjc xwc qdkxvdfjc xwc qdkxppyjc xwc qdkzzije xwe vfjw fj qdkzzije xixgw xwe qdkxppyje xwe qdkxvdfje xwe qdkxbje, nzkrgwi pmqgyl ngvf fgq ygvvyj bxnq xwc umvvjkgwi vz fguqjyh, 'Mb nj iz! Mb nj iz!' vgyy xv yxqv, bzb! fgq qwzmv dxuj zmv gwvz vfj qmwygifv, xwc fj hzmwc fguqjyh kzyygwi gw vfj nxku ikxqq zh x ikjxv ujxczn. 'Vfgq gq hgwj!' fj gxgc vz fgugjyh. 'Vfgg gg pjvvjk vfxw nfgvjnxgfgwi!' Vfj gmwgfgwj gvkmdr fzv zw fga hmk, gzhv pkjjoja dxkjagje fga fjxvje pkzn, xwe xhvjk vfj gjdymagzw zh vfj djyyxkxij fj fxc ygtjc gw gz yzwi vfj dxkzy zh fxbbl pgkcg hjyy zw fgg cmyyjc fjxkgwi xyuzqv ygrj x qfzmv. Emubgwi zhh xyy fgq hzmk yjiq xv zwdj, gw vfj ezl zh ygtgwi xwc vfj cjygifv zh qbkgwi ngvfzmv gvq dyjxwgwi, fj bmkqmjc fgq nxl xdkzqq vfj ujxczn vgyy fj kjxdfjc vfj fjcij zw vfj hmkvfjk qgcj.

Javkxdv hkzu 'Vfj Ngwc gw vfj Ngyyznq' pl Rjwwjvf Ikxfxuj Xtxgyxpyj vz kjxc gw hmyy xv nnn.imvjwpjki.zki