

2/29/2016 (#37 this year)

Wow! The 29th of February! You don't see that very often (ha ha). This is a rare¹ and auspicious² day. Does anyone have a birthday today? If you do, then you are only one fourth³ your age. If you are 16 then you are really only 4 years old! **If you, or anyone you know, does have a birthday today then come and see me and I will buy the birthday person an ice cream.** Don't forget to bring some proof⁴! And this week we have the sixth grade graduation⁵. I'm sure all of the students and teachers are nervous, but excited as well.

Something You Didn't Know (Encryption⁶)

1. Encryption comes from the science of⁷ cryptography⁸. This comes from Greek⁹. "Kryptos" means secret, hidden; "graphien" means writing, study.
2. The earliest encryption is on the tomb¹⁰ of Khnumhotep II in Egypt.
3. Early forms of¹¹ encryption were alphabet substitution codes¹². For example, b=a, c=b etc. These kind of codes can be broken¹³ by looking at letter occurrence¹⁴. For example, in English, e is the most common letter¹⁵ and appears¹⁶ 13% of the time. Whatever letter appears in 13% of the code is probably e. A computer would crack a code¹⁷ like this in seconds.
4. A modern code would take a computer trillions¹⁸ and trillions of years to break.
5. Zljb ql qeb Bkdifpe lccfzb tfqe x oba mbk xq 12:45 lk Qeropaxv xka F tfii dfsb vlr x zelzlixqb.

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

- | | | | |
|-----------|----------------|-------------|------------|
| BLACK ICE | HAIL | SEASON | SNOWBOARD |
| BLIZZARD | HEADBAND | SKATES | SNOWFLAKE |
| BOOTS | HIBERNATION | SKI DOO | SNOWMAN |
| CARNIVAL | HOCKEY | SKI PANTS | SNOWSHOES |
| CHRISTMAS | HOLIDAYS | SKIING | SOLSTICE |
| COLD | ICE FISHING | SLED | SOUP |
| EGG NOG | ICICLES | SLEET | STEW |
| FIREPLACE | KNIT CAP | SLIPPERY | STORM |
| FIREWOOD | LONG UNDERWEAR | SNOW CASTLE | SWEATSHIRT |
| FOG | MITTENS | SNOW PLOW | TOBOGGAN |
| FREEZE | OLYMPICS | SNOW SHOVEL | VACATION |
| FROST | PARKA | SNOW TIRES | WIND CHILL |
| GLOVES | SCARF | SNOWBALL | WOOL SOCKS |

Last Week's Answers

6	-	14	x	24	+	7	-	1	+	16	308
+											
13	+	29	x	10	/	2	-	27	+	32	163
x											
11	x	25	+	15	-	19	-	8	/	4	269
+											
26	x	30	+	35	-	21	-	22	-	18	754
+											
20	+	12	/	3	x	28	+	31	+	17	180
+											
36	/	9	x	5	-	33	-	34	-	23	-70
231		-768		292		-16		-8		150	

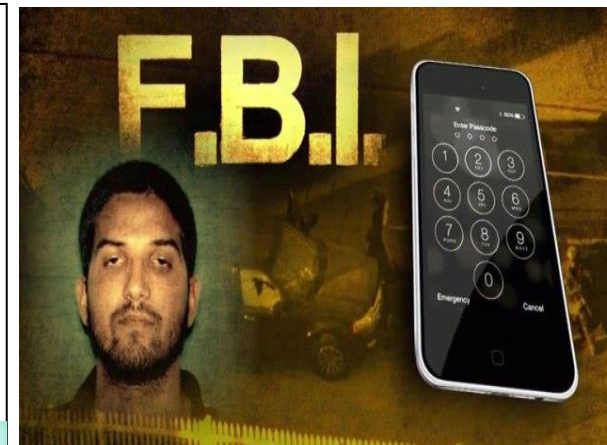
Announcements

Graduation assembly on Mon lesson 1.
 Graduation on Tues. I to V no classes.
 End of year tests start on Friday.
 Good luck.

News

Court case to make Apple open phone

A court case¹⁹ to make the giant multinational company²⁰, Apple, unlock an iPhone is becoming serious. The iPhone in question²¹ belonged to²² Syed Farook. He and his wife killed 14 people in San Bernardino last year. They had no connections²³ to ISIS²⁴ or any other terrorist organization²⁵ but were "home grown" terrorists²⁶. Syed and his wife



Now the FBI has Syed's iPhone. iPhones are encrypted in such a way that²⁹ it would take a supercomputer³⁰ many years to decrypt³¹ them. This means if you lose your iPhone, whoever finds it cannot open it. That is good for you, but not for the FBI. They cannot unlock Syed's iPhone and they want Apple to do it. Apple say they can't but the FBI don't believe them.

Apple is fighting the FBI in the courts. The FBI only want Apple to open the one iPhone but, if they do, the floodgates will open³² and they will have to open more phones. The public's³³ trust³⁴ in them will be severely³⁵ hurt. This is a fight Apple can't win, but they have to try.



- 1.Rare 珍しい 2.Auspicious 幸先の良い 3.One fourth 四分の一 4.Proof 証拠 5.Graduation of 卒業式
 6.Encryption 暗号化 7.The science of ~の化学 8.Cryptography 暗号学 9.Greek ギリシア語 10.Tomb 墓地
 11.Form of ~の形式 12.Substitution code 換字式暗号 13.Break a code 暗号を解く 14.Occurrence 発生
 15.The most common letter 最も多い文字 16.Appear 出る 17.Crack a code 暗号を解く 18.Trillion1 兆
 19.Court case 裁判事件 20.Multinational company 多国籍企業 21.~in question 問題の~ 22.Belong to ~誰かに所有する 23.Connection 関係 24.ISIS イスラム国 25.Terrorist organization テロ組織 26.Home grown terrorist 国内で育ったテロリスト 27.Shootout 銃撃戦 28.FBI 連邦捜査局 29.In such a way that [that 以下] といった[のような]方法で 30.Supercomputer スーパーコンピューター 31.Decrypt 暗号を解読する 32.Open the floodgates ~の歯止めを解く 33.The public 国民 34.Trust 信用 34.Severely 厳しく