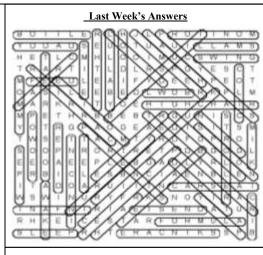
10/24/2016 (#24 this year)

Welcome back to everyone who went to Hiroshima and Cambodia. I hope you had a good time and learned a lot. Those experiences¹ are invaluable². The third grade are going to be in Canada for another week and I hope they're having a wonderful time. The heaters have been switched on in many of the classrooms recently³. I still think it is too early. Some of those rooms are in the high twenties⁴, which is hotter than it would be in June or July. I will have to start teaching in shorts and a T-shirt. Do you think I should still wear my tie?

Something You Didn't Know (Undersea Cable⁵)

- 1. The first undersea cable was a 3km stretch⁶ that was laid⁷ in 1849, off the coast of England. It took ten years of experimenting⁸ first to see what kind of rubber coating⁹ they should use.
- 2. The first line to connect¹⁰ countries was in 1850. A cable connected England to France. The cable was used for telegraph signals¹¹.
- 3. By 1872, all of the continents¹² had been connected by cable except for Antarctica¹³.
- 4. From the 1850s to 1911, Britain laid most of the cable in order to contact her colonies¹⁴.
- 5. When Britain declared war on ¹⁵ Germany in 1914, the first action ¹⁶ was to cut all of Germany's undersea cables. That way Germany had to communicate by wireless ¹⁷ and Britain could listen.
- 6. The first cables could transmit data¹⁸ at about 12 words a minute. Now they can send 433,630,518,400 words a minute.

If
$$2 + 3 = 13$$
 $3 + 4 = 25$ $4 + 5 = 41$ Then



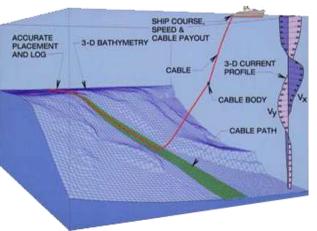
Announcements

5th grade have a holiday on Monday. 2nd grade have a speech contest on Thursday. 3rd grade get back to Japan on Friday. No afternoon classes on Friday.

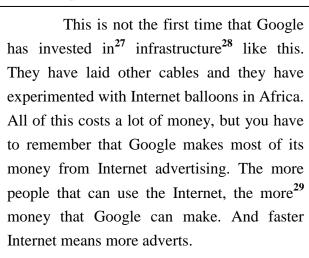
Google and Facebook Plan to Lay Undersea Cable

Google is working with Facebook and a Chinese company called China Soft Power Technology Holdings to lay a trans-Pacific¹⁹ undersea data cable. The cable will stretch from Los Angeles to²⁰ Hong Kong and will be almost 13,000km long. The cable should be laid and operational²¹ by 2018. The cable will make data transfer²² across the Pacific²³ much faster.





The cable will be able to transfer data at a speed of 120 terabytes²⁴ per second. That is a lot. To give you some idea of how much that is, remember that a high definition²⁵ copy of Titanic (a 3 hour movie!) is about 3 gigabytes²⁶. That means 40,960 people could send the movie Titanic across the cable every second!! Not that anyone would want to.





1.Experience 経験 2.Invaluable かけがえのない 3.Recently 最近 4.High twenties 2 0 ℃台の後半 5.Undersea cable 海底ケーブル 6.Stretch の部分 7.Lay 敷設する 8.Experiment 実験する 9.Rubber coating ゴム製被覆 10.Connect つながる 11.Telegraph signal 電信信号 12.Continent 大陸 13.Antarctica 南極大陸 14.Colony 植民地 15.Declare war on~に戦争を宣言する 16.First action 最初にやること 17.Wireless 無線通信 18.Transmit data データを送る 19.Trans-Pacific 太平洋横断 20.Stretch from ... to A から B まで伸びる 21.Operational 使用可能 22.Data transfer データ転送 23.Pacific 太平洋 24.Terabyte テラバイト(1064GB)25.High definition 高解像度 26.Gigabyte ギガバイト (1064MB) 27.Invest in~に投資する 28.Infrastructure インフラ 29.Themore ... the more ... ~すればするほど~になる