

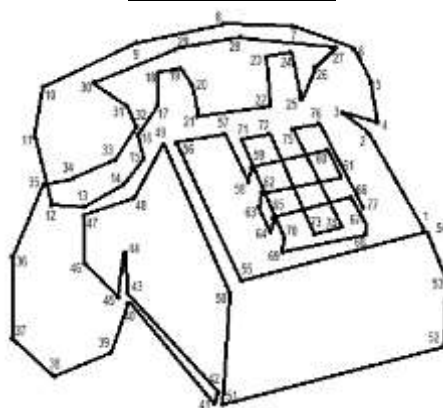
Well, happy independence day<sup>1</sup> if you're American. Happy Monday if you're not. Apparently<sup>2</sup> my country's independence day is going to be June 24<sup>th</sup>. America celebrates<sup>3</sup> theirs with pride<sup>4</sup>. "Look at the success<sup>5</sup> we have become," they shout with fireworks from the rooftops. I'm not sure Britain is going to be quite so happy. Still, as the uncertainty<sup>6</sup> settles down<sup>7</sup> the pound is starting to rebound<sup>8</sup> and the financial markets<sup>9</sup> are recovering<sup>10</sup>. Perhaps<sup>11</sup> things will be ok after all. And, if you think of the big picture<sup>12</sup>, in a hundred years no one will remember anyway.

### Something you didn't know about color

1. When babies are born they cannot see color. After about two weeks red is the first color they can see. This is because it has the longest wave length<sup>13</sup>, making it the easiest to process.
2. For thousands of years, blue was the most expensive color to make. That is why in most religious<sup>14</sup> paintings Jesus and Mary are wearing blue.
3. The color yellow can cause nausea<sup>15</sup> and dizziness<sup>16</sup> which is why it is avoided<sup>17</sup> on airplanes. Also, bright yellow is supposed to be the most irritating<sup>18</sup> color.
4. Colors are not real. They are only the result of the way our brains process information<sup>19</sup>. That is why many people can see the same color in different ways and we can never know how someone else sees a scene.
5. Dogs see in pale colors not in black and white as many people believe.



### Last Week's Answers



### Announcements

Mr. Yamakawa has been telling people that I am happy because the UK is going to leave the EU. I am not happy. I think it is a terrible thing. **Please tell him.**

### New Color of Blue Discovered

Scientists have discovered<sup>20</sup> a new color of blue! What does that mean? When I first heard it, I thought that they had actually<sup>21</sup> found a new color. I didn't see how that was possible because there are only so many colors that light can be refracted<sup>22</sup> into and there is no way to "find" a new color, unless it is a new part of the spectrum<sup>23</sup> that we can't see, like ultraviolet<sup>24</sup>.



It turns out that the scientists have found a new colored pigment<sup>25</sup>. A pigment is something we can use to color things. Over the centuries humans have found different ways of coloring things. We can make things almost any color we want. The problem has always been that the pigments we use are toxic<sup>26</sup>. This new blue is completely free of toxic ingredients<sup>27</sup>.

The scientists mixed manganese oxide<sup>28</sup> with other chemicals and heated it to 2000°C. The result was this new blue. They are calling the color YInMn after the chemicals<sup>29</sup> it was made from. The new color is also a better insulator<sup>30</sup> because it reflects<sup>31</sup> more light so it may have many uses in technology from now on. Be prepared to see YInMn on a lot of things. I think they should think of a new name, though. Steblue.



**1.Independence day** 独立記念日 **2.Apparently** 実は **3.Celebrate** お祝い **4.Pride** 自慢する  
**5.Success** 成功 **6.Uncertainty** 不安 **7.Settle down** 落ち着く **8.Rebound** 回復する **9.Financial market** 金融市場 **10.Recover** 回復する **11.Perhaps** もしかして **12.The big picture** 全体像  
**13.Wave length** 波長 **14.Religious** 宗教的 **15.Nausea** 吐き気 **16.Dizziness** 目まい **17.Avoid** 避ける  
**18.Irritate** イライラする **19.Process information** 情報を処理する **20.Discover** 発見する  
**21.Actually** 本当は **22.Refract** 屈折力を測定する **23.Light spectrum** 光スペクトル **4.Ultraviolet** 紫外線  
**25.Pigment** 色がつく **26.Toxic** 中毒 **27.Ingredients** 材料 **28.Manganese oxide** 酸化マンガン  
**29.Chemical** 化学品 **30.Insulate** 覆う