Point of View

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Crow and Cigarette Butt

by SARANG PARK

Image Source: The Swaddle

What can you think of when you think about the crows? Many people think of crows as symbols of bad luck.

Crows have very high intelligence. In terms of human intelligence, crows have about a 6-year-old child intelligence. In addition, crows can use tools freely. For example, crows use wooden sticks like forks to catch bugs hidden deep in trees, and bend branches with their beaks to use them as hooks. If there are no suitable tools for hunting, crows cut hard leaves and make their own tools. Also, when they cannot open walnuts using their tools, they leave walnuts on the side of the road to break down the walnuts by car.

These are some examples showing how intelligent crows are. Using the intelligence of crows, a Swedish startup company conducted an experiment. After designing a trash can that gives peanuts as a prize when a crow bites a cigarette butt, they trained and implemented a few things for the crow, and the crew bit the cigarette butt. The experiment was successful.

Sweden has a serious cigarette speculation problem, with more than one billion cigarette butts thrown away every year in Södertälje, a city in Sweden. The cost of cleaning this up is about 20 million kroner in Swedish money, about 2.1 million dollars. However, if crows do this job, the cost will be reduced by about a quarter. This is not the first attempt to be made. A few years ago, Trainers trained six crows at Puy du Fou theme park in western France, and crows played the role of a cleaner. When this happened in France, the French people's perception of crows was much better than before, and people started to like the crows.

But cigarettes have many harmful substances. Even if people do not smoke directly and do secondhand smoke, cigarettes cause liver cancer. Wouldn't that have a bad effect on crows? It is not yet known how picking up cigarette butts affects crows. However, some scientists say that birds that used to pick up food from city waste bins can become healthier if they eat healthy food through these activities.

Now, it has been tested only for horn crow species, and it seems that other birds, such as magpies and crows, can also be trained. But why are only crows and birds tested? This is because crow species are the most intelligent bird, even including all animals, so it is possible to understand the trade relationship between garbage and peanut compensation and less likely to eat garbage or do things by mistake.

In this way, even though crows have about 6-year-old child intelligence, they have succeeded in education to pick up trash. Now we are left with one question. Why adults at least 20 years old still cannot fix throwing cigarette butts on the floor?

Pencil vs. Mechanical Pencil

by JIYONG SIM

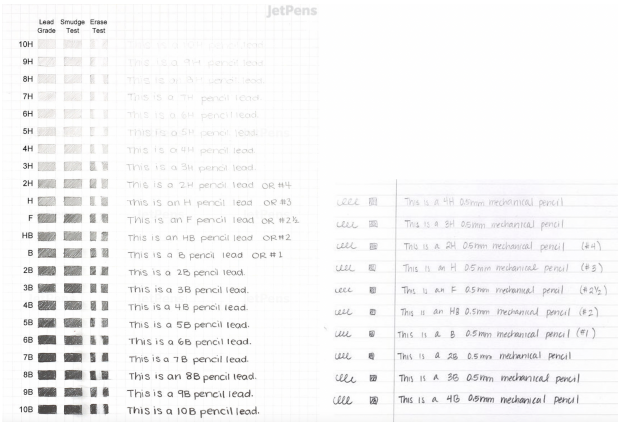

Image Source: JetPens

Pencils and mechanical pencils are the writing tools made of graphite, which can be easily erased by a rubber eraser. They both are used mostly by children or students for drawings, especially sketching, because they are easy to fix mistakes by erasing. Since pencils are thick, they are useful for drawing and shading: they make drawings look more natural. Also, writing big letters is better with with pencils than mechanical pencils. Unlike mechanical pencils, their leads are strong enough not to break when hard forces are applied.

However, pencils' disadvantages are that it is hard to write or draw complicated things. For example, writing Chinese letters with a pencil is not easy. Some parts of the drawing are not easy using thick pencil. Another disadvantage of pencils is that it needs to be sharpened to write neatly, making pencil become shorter. Sharpening a pencil takes more time than just clicking the back part of the mechanical pencil.

Unlike pencils, mechanical pencils are useful for writing or drawing sophisticated designs, which requires details. For example, Chinese letters are hard to write with a pencil because it is thick, but mechanical pencils are easier to write complicated letters. Also for drawing, mechanical pencils are easier to draw in some places that thick pencils are not able to draw. The reason for most people using mechanical pencils is becasue of the convenience. Pencils need to be sharpened to write the letter clearly, but just clicking the back part of mechanical pencil takes less time than sharpening. However, mechanical pencils' disadvantages are since it is too thin, it is hard to draw things. This is why mechanical pencils are not usually used in drawing. To color and shade things, thick pencils are better than thin pencils. Also, mechanical pencils' lead breaks when too much force applied. Both pencils and mechanical pencils have advantages and disadvantages. We cannot decide which is better or which is worse. However, we know what the best is: using both of them will redeem each other's disadvantages.

Why Does 0 Factorial Become 1?

by DAWN OH

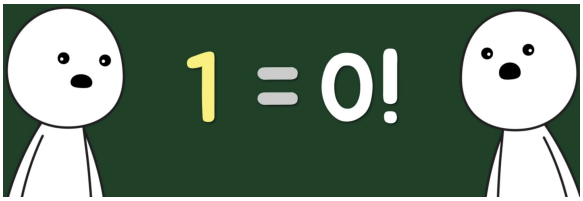

Image Source: SMGI Youtube

In mathematics, factorial represents the product of all positive integers less than or equal to a given integer. A factorial of a non-negative integer n is denoted by $n!$. For example, 2! is 1×2, and 3! is $1 \times 2 \times 3$. Using the same logic, 0! seems to have a value of 0, but we learn that 0 factorial equals 1. Why does 0! follow a different logic of factorial?

Using the properties of factorial, we can easily prove why 0 factorial becomes 1. 4!, $1 \times 2 \times 3 \times 4$, can be written as $4 \times 3! = 4!$, and diving both sides by 4, the equation is re-expressed as $3! = \frac{4!}{4}$. Converting the equation to a general form using the positive integer n, it is $n \times (n-1)! = n!$, which means $(n-1)! = \frac{n!}{n}$. Then, when plugging 1 into n, the equation becomes $0! = \frac{1!}{1}$, which is 1. Therefore, 0 factorial has to be 1 to conserve the factorial properties.

$0! = 1$ can also be proved using a combination formula. The combination is another mathematical technique to determine the number of possible arrangements in a collection of items, in which the order of the selection does not matter. For example, when selecting r items out of total n, the combination is denoted as $\binom{n}{r}$ with the formula of $\frac{n!}{r!(n-r)!}$. When selecting two people out of four, it has the combination of $\binom{4}{2}$, and we can find the number of possible arrangements by $\frac{4!}{2!(4-2)!} = 6$.

Selecting four people out of four, without using the combination, we can easily find out that there is only one possible arrangement. That means $\binom{4}{4}$ equals 1, $\frac{4!}{4!(4-4)!} = \frac{4!}{4!0!} = 1$. Simplifying, the equation can be written as $\frac{1}{0!} = 1$. Therefore, 0 factorial equals 1.

In order to conserve the properties of the factorial and to use mathematical formula with factorial in it, 0 factorial is shown to necessarily have the value of 1.

Why Is LEGO So Expensive?

by JIHOON CHOI

Image Source: Talk Radio News

Do you know LEGO? They are recognized as toys, in which you stick them together to create inventions. Sometimes you might wonder about LEGO. Why are these small, plastic toys more expensive than they seem to be?

LEGO is one type of building toy created by the LEGO company in Denmark, first sold in 1940. The price then is surprising, more expensive than what it is now. It was about 40 cents per brick, which now is 10 to 12 cents per brick. What has made LEGO so expensive?

First, LEGO is known for its quality. LEGO uses the exact mold for each batch of bricks they make, and each brick is made with specific codes to allow great quality control. So, if a brick is faulty, LEGO can trace it back and fix the piece, so you do not need to worry about getting a bad piece.

The second reason is related to brand collaborations. LEGO has been collaborating with different companies such as Disney and Star Wars. This is a feature that other LEGO-like companies

do not have, so LEGO can charge as expensive as they want for these collaborated sets.

Lastly, old LEGO sets, such as the Death Star Set, are very hard to find, which makes them more expensive. So when they are sold second-hand, the prices may pass the original price.

LEGO can be expensive, but they also have a positive side. Everyone, including people with autism, can enjoy playing with LEGO. It can also improve the social skills of those who struggle with direct communication.

McDonald's Genius Marketing Strategy with the Catchy Big Mac Song

by JOSHUA BAKER

Image Source: Says

If you were in Korea in 2015, you probably have heard about the Big Mac challenge. It was an event where if you sang the big mac song in McDonald's, you would get a free big mac. This event blew up, and it has been one of the best marketing strategies that I have ever seen. I will talk about two reasons why this strategy was so successful in my opinion.

The first reason is quite obvious. McDonald's did this event to get public attention and promote the big mac. By advertising it with a catchy song and a chance to get a free meal, the advertisement blew up and everyone was so interested in McDonald's new product. Assuming that it costs two dollars to produce a Big Mac, they would have used thousands of dollars to host this event. They essentially gave out 2 dollars to every consumer who sang the big mac song. So the cost of this event would have been enormous. The event made the Big Mac one of the most famous burgers in Korea, so it did its job even though it would have been expensive.

The second reason is brand transparency. When a brand is transparent about their business, they show their honest opinions of their goals and are clear about what they want to achieve. Brand transparency increases brand trust, and McDonald's did this in a minor way. The Big Mac song's lyrics talk about the ingredients of the big mac. The English version is "Two all-beef patties, special sauce, lettuce, cheese, pickles, onions on a sesame seed bun". Consumers are more likely to consume a product when they know the ingredients. Imagine you had to choose between a burger where you know the ingredients and a burger where you do not know the ingredients. You would select the one where you know the ingredients.

These were the two reasons I think the Big Mac challenge was a successful marketing plan. Even though they might have lost a lot of money in the short run, this was an investment for the future, and I think this investment paid off.

BLACK DOG SYNDROME

: A Tendency for Black Dogs to Be Picked Last at the Shelter In Favor of Lighter-Colored Dogs

Black Dogs Get Adopted Less and Inspire More Fear,
Yet They Are Not Different From Other Dogs

PLEASE PROVIDE A HOME FOR BLACK DOGS
ALL THEY NEED IS YOUR LOVE :)

POINT OF VIEW