

## THE POTENTIAL OF OUR BRAINS



Even with our perceptual (感知的) filters blocking out most of the information that we receive, we still need some way of making sense of the rest of it.

So all the information gets processed into a mental (心理的) framework. The mental framework is like a scaled down model of the real thing. It misses some of the details, but broadly it looks the same. I call this our Operating System.

We start out having certain genetic tendencies. These influence the way that we react to situations. So each Baby will interpret (解釋)

and react to the same stimulus in different ways depending on their temperamental traits (特徵). So each is already starting to build up their own Operating System.

You've probably read that we only use 10% or less of the potential of our brain. Here's what that is based on.

All of us have billions of neurons at birth. The first time we process new motions, thoughts and actions these build a neural pathway by connecting neurons. The newborn baby responds to its interpretation of an event in the best way it knows how.

This creates a fresh path, like footprints in the snow. The next time the baby interprets an event needing the same response he takes the easiest route, which is following the previous footsteps. Sometimes he will add a new step or branch off slightly.

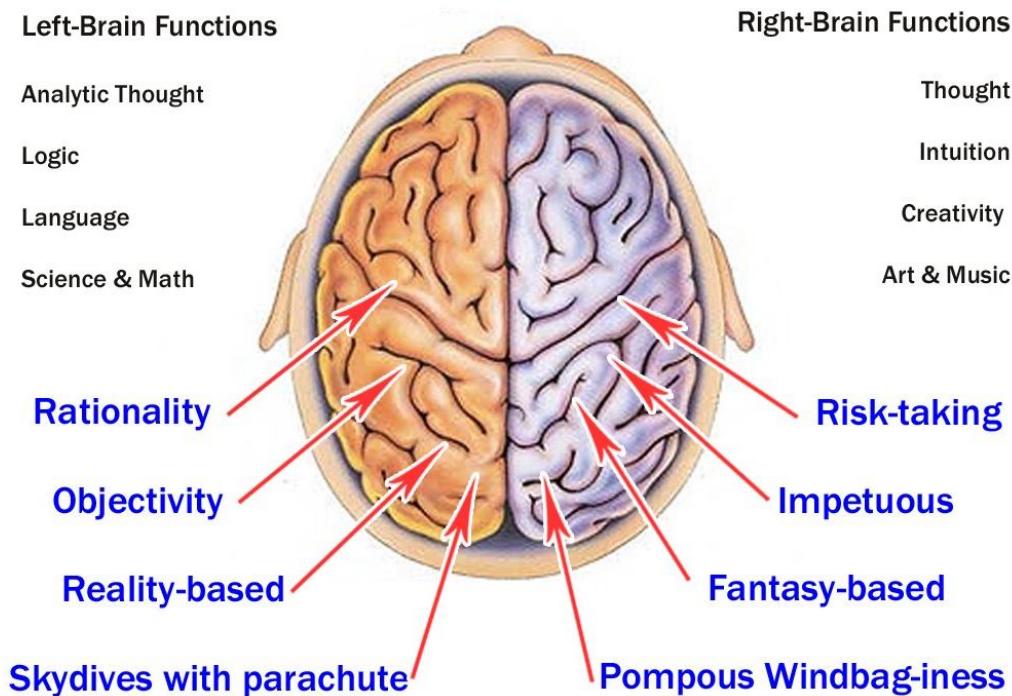
By the time he gets to be saying six or seven there are clear pathways.

By the age of seven, 70% of all the neural connections your brain ever will

make are made. It's not that we can't make more connections. But most of us do the same things over and over again. We become stuck in our ruts (常規). Therefore we don't do new things and so we don't create new connections.

## HOW TO INCREASE OUR BRAIN POWER TO BECOME SMARTER?

### Left and Right Brain Functions



Increase your brain power with methods other than relentless studying and irksome (令人厭煩的) brain cramming. The key is to improve the way your brain cells work with each other. Though the brain is much more complex, it has a lot in common with computers. However, it is still a living organ and it needs your nurturing.

Understand how the brain works. You have, more or less, one hundred billion neurons working inside your head. The brain uses electricity as well as chemicals known as neurotransmitters (神經傳送素). Your mind communicates with your entire body through the nerves that branch out from your spinal chord. Hormones are carried through the blood, with the power to change how we think and feel.

Exert your brain or it will deflate. The brain does get larger when presented with new challenges. The more intelligent you are, the bigger your brain is. This doesn't mean that you will have more brain cells, but that you will have more of the cells that support and feed your brain. Just remember, if you don't exercise your brain, it will get flabby(不結實的), just like any other muscle.

We have successfully held a video show: **How the Universe Works《宇宙解碼》** on 20/9. Here are two reflections of our schoolmates after watching the video show:

**關立言 3B (13)**

影片詳盡介紹衛星的形成和特性。當中我學會很多在宇宙發生的活動，如：吸積和潮汐摩擦等。令我最感興趣的地方是衛星不尋常的舉動，當中海衛一是我最有興趣的衛星。我也增加了對月球形成的知識，知道月球是在地球有撞擊後形成的，也知道地球因天有生命的可能。

**林家進 4D (17)**

看完《宇宙解碼》，我十分感動。小學時我就知道要尋找外太空生命，可以從衛星入手，但一般書籍都只是輕描淡寫。而《宇宙解碼》對衛星的解說則更加詳細，又從生命入手，符合我個人興趣，所以我十分享受。我希望以後能多看同類的科學影片。

**Next Video Show:**

Title: **Ancient Aliens - The Da Vinci Conspiracy《遠古外星人-達文西陰謀》**

Details: **16-10-2012** 4:15-5:00 p.m. @ Chem. Lab. (Rm 512)

Special gifts will be given if you can answer the Quiz Game correctly.

**\*\* We are going to invite some alumni and professors for seminars in our school. The details will be provided later. \*\***

科學電影名稱	日期	時間	票價	地點
飛龍世界	至 2013 年 2 月 28 日(逢星期六)	下午一時至三十分(39 分鐘)	前座 12 元	何鴻燊天象廳
追擊龍捲風	至 2012 年 10 月 31 日(逢星期六)	下午三時至五十分(43 分鐘)	後座 16 元	(香港太空館)

科普講座名稱	日期	時間	地點	費用	講員
海洋與氣候	10 月	下午二時至	香港科學館演講廳	免費，即場入座，座位先到先得	周文教授 (香港城市大學能源與環境學院)
	13 日	三時			陳英凝教授 (香港中文大學醫學院)
天氣與健康	(星期六)	下午三時至四時			

# Time to Relax!

**Opinion Corner** is a new section and you can **express your views towards science.**

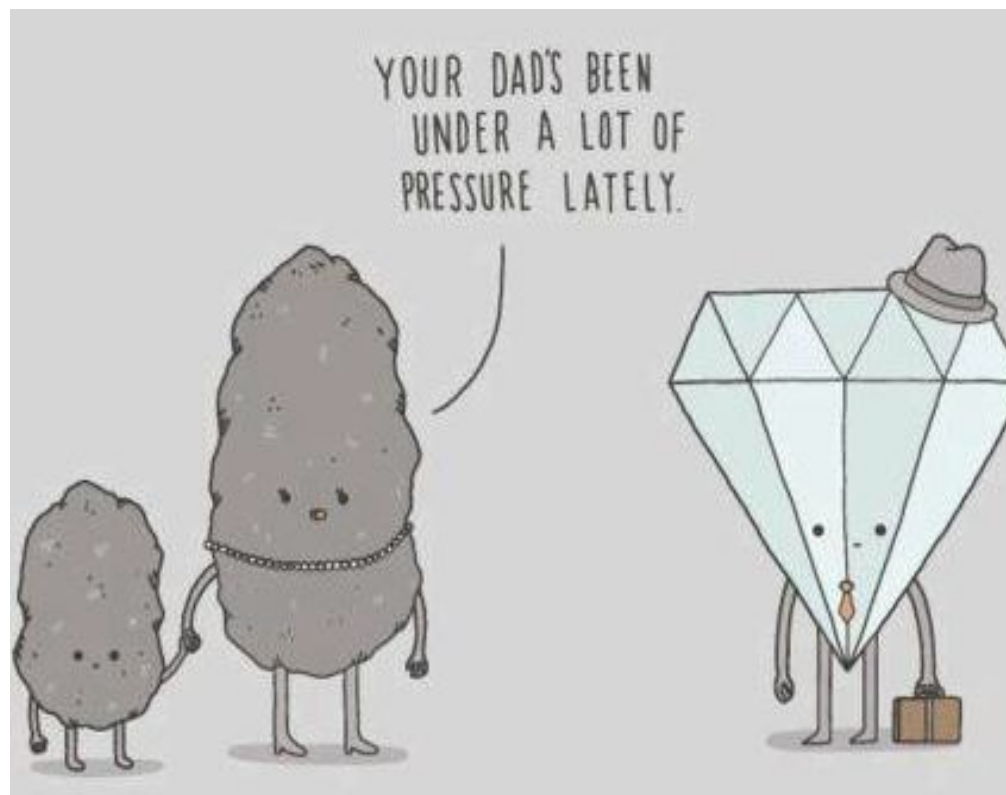
The best article will be published in "Sound of Science" and a **special gift** will be given.

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You are welcome to submit your ideas into our **collection box outside the staff room.**

The answer of the Sudoku will be posted on the "Sound of Science" next month. Please stay close with us!

## Comic Corner:



**Science society  
2012-13**

**Chairperson:**  
Mak Shun Ki 5E

**Vice-chairperson:**  
5A Tang Pui Kei

**Committee members:**  
3D Lee Ka Chun  
3E Chiu Chun Hung  
4A Ko Tsz Ching  
4A Yuen Nok Yu  
4D Tse Wai Han  
4E Poon Wai Tak  
4E Tsang Hing Pong  
4E Wan Chi Yeung