### National Science And Technology Museum

### Crazy Scientists: The Fascinating Science Exhibition

#### 1. A brief introduction to the exhibition

Science is difficult? No! Science is fascinating.

The rich imagination of scientists has caused science to be prevalent in our lives.

Welcome to the crazy scientist group. Follow the journey of prominent scientists in the history of science, and enter the laboratories of electric science, optics, mechanics, and physiology. Learn science by interacting with the hands-on exhibition, and experience the scientists' perseverance through conducting tests and experiments repeatedly.

#### 2. Exhibition characteristics

- Concretization of scientific theories and understanding science through various interactive exhibitions.
- Capturing the critical characteristics of scientists and presenting the scientists in a comic style.
- Use of the Nobel Prizes in the different fields of science as guidance to encourage students to conduct research.



Key Visual

#### Scientist

Albert Einstein 亞厄特·愛恩斯坦





Nicolaus Copernicus 尼古拉・新白尼

James Watson 詹姆斯·華生





Isaac Newton 艾薩克・牛頓



Isaac Newton 艾薩克・牛頓



### 3. Area plan

- A. Introduction area
- B. Electricity Lab
- C. Optics Lab
- D. Mechanism Lab
- E. Physiology& Medicine Lab
- F. Science Laureates

### 4. Exhibition

The exhibition of "Crazy Scientists: The Fascinating Science Exhibition":

# Crazy ScientistsThe Fascinating Science Exhibition





### Introduction

- Is science difficult? Come on! Science is interesting!
   Imagination plays an important role that allows science to work in our daily life.
- Interactive exhibits allow us to experience science and thus cultivate experimental spirit.



Popular science can be devided into 4 categories.

Electricity, optics, mechanism, and physiology&
medicine. Finally, we will conclude this part with Nobel
Award. We hope to inspire people after the introduction.

### Introduction

### Introduction area

**Optics Lab** 

Introduction to famous scientists in history. By taking an aptitude stest, you can know who you resemble.



By practical experience, we can know Michael Faraday, the father of electricity, electromagnetism, and electrochemistry.

Genius Albert Einstein will take you to the world of colorful optical illusion.

### Mechanism Lab

Isaac Newton will introduce the magic of universal gravitation which happens anytime.

### Physiology& Medicine Lab

John Hamish Watson will tell you how the body works, and unravel the DNA myth.

### **Science Laureates**

Introduction to Nobel's life and foundation of Nobel Award. Hope we can understand the meaning behind the stories. Area plan

D. Mechanism Lab

音波展景

飛球 競速

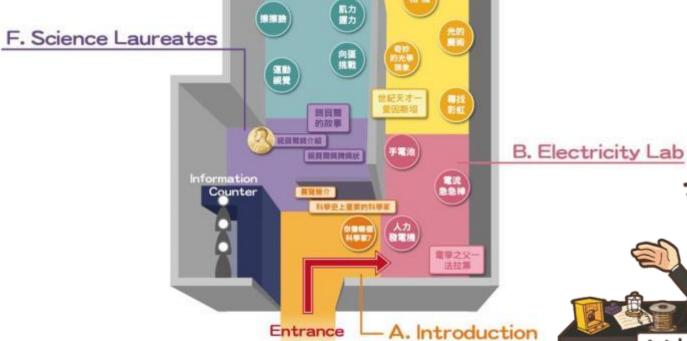
站在巨人的 開榜上一牛鞭

DNA之父 一辈生

吸煙 呼出 **†**|

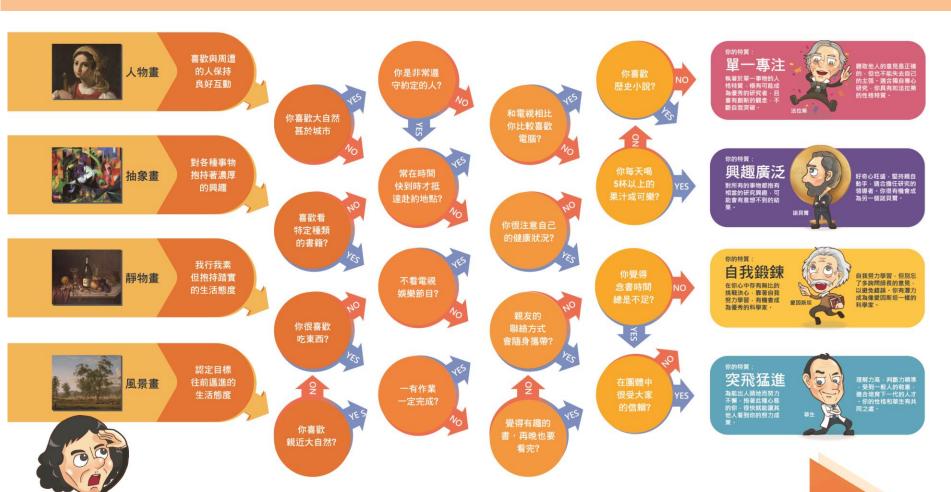


C. Optics Lab



Welcome to my lab.

## Aptitude test can examine your science research characteristics.



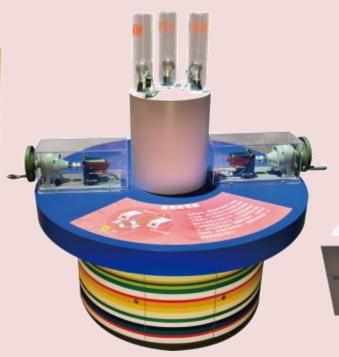
## **Electricity Lab**

**Electric Stick** 

**Human Power Generator** 

**Hand Battery** 







Probe acts as current circuit. When we touch probe on current path, it will generate electiricity which makes an alarm sound. Changing magnetic field can make electricity current. The more faster you rotate, the more brighter bulb will be. Our hands are coated in a thin layer of sweat which acts as the electrolyte. Putting your hand on the metal plates can generate electric current.

## **Optics Lab**

**Light Magic** 

Camera

Maze on the Wall



We can see that objects appear different colours because they absorb the wavelengths of light and reflected other colours.



When an image is projected through a small hole, that screen will shoe a reversed and inverted image.

The surroundings of the projected image have to be relatively dark for the image to be clear.



We can send Einstein back to home through light's polarization.

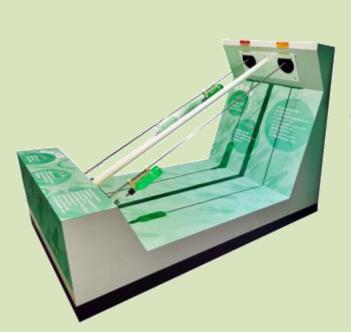
## Mechanism Lab

### Oscylinderscope

### **Air Rocket**

### **Balls Racing**







Rotate the wooden drum and pluck a guitar string.

Using law of action and reaction to send the rocket to space.

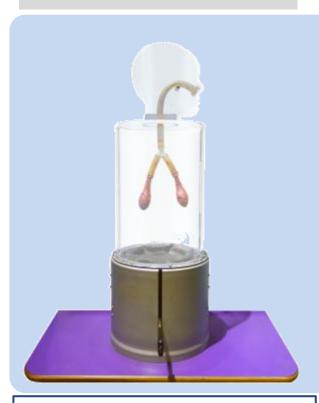
When the ball turns, centripetal force and friction can make the ball move forward.

## Physiology& Medicine Lab

### **Breathe In Breathe Out**

### **Cheshire Cat**

### **Egg Challenge**



Diaphragm, a dome-shaped muscle that works with your lungs to allow you to inhale and exhale air.



You will see an unclear and ambiguous face.

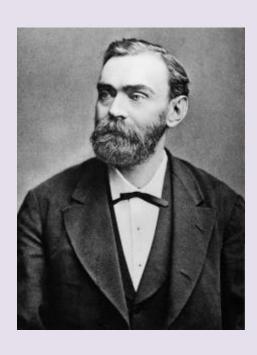


How long does it take to burn 80 calories (an egg)?

## Science Laureates

### Nobel's story

### **Origin of Nobel Prize**



Introduction to Nobel's life career and the foundation of Nobel Award.



Nobel Prize motivates students to fulfill their dream and make differences in the society.

## Information

