



# Lucky Stars

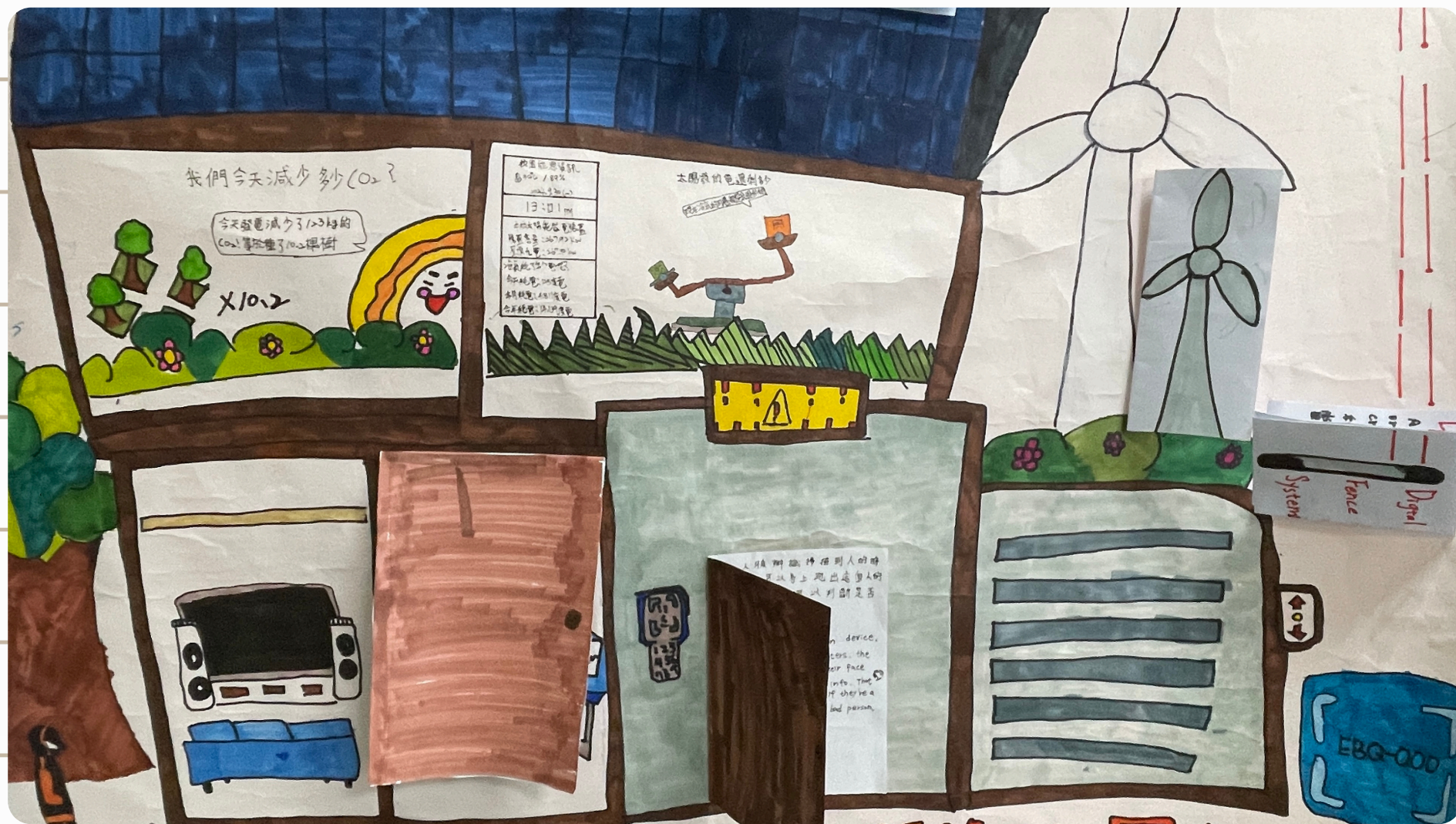
Facial recognition  
system

By Shelly Nini Yori Bobo  
Nina Mini Sean Hikaru David



# Smart Campus to Prevent Intrusion

## 智慧校園-外人入侵

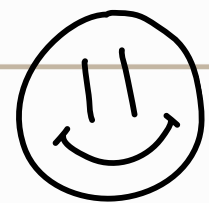


A system to prevent outsiders

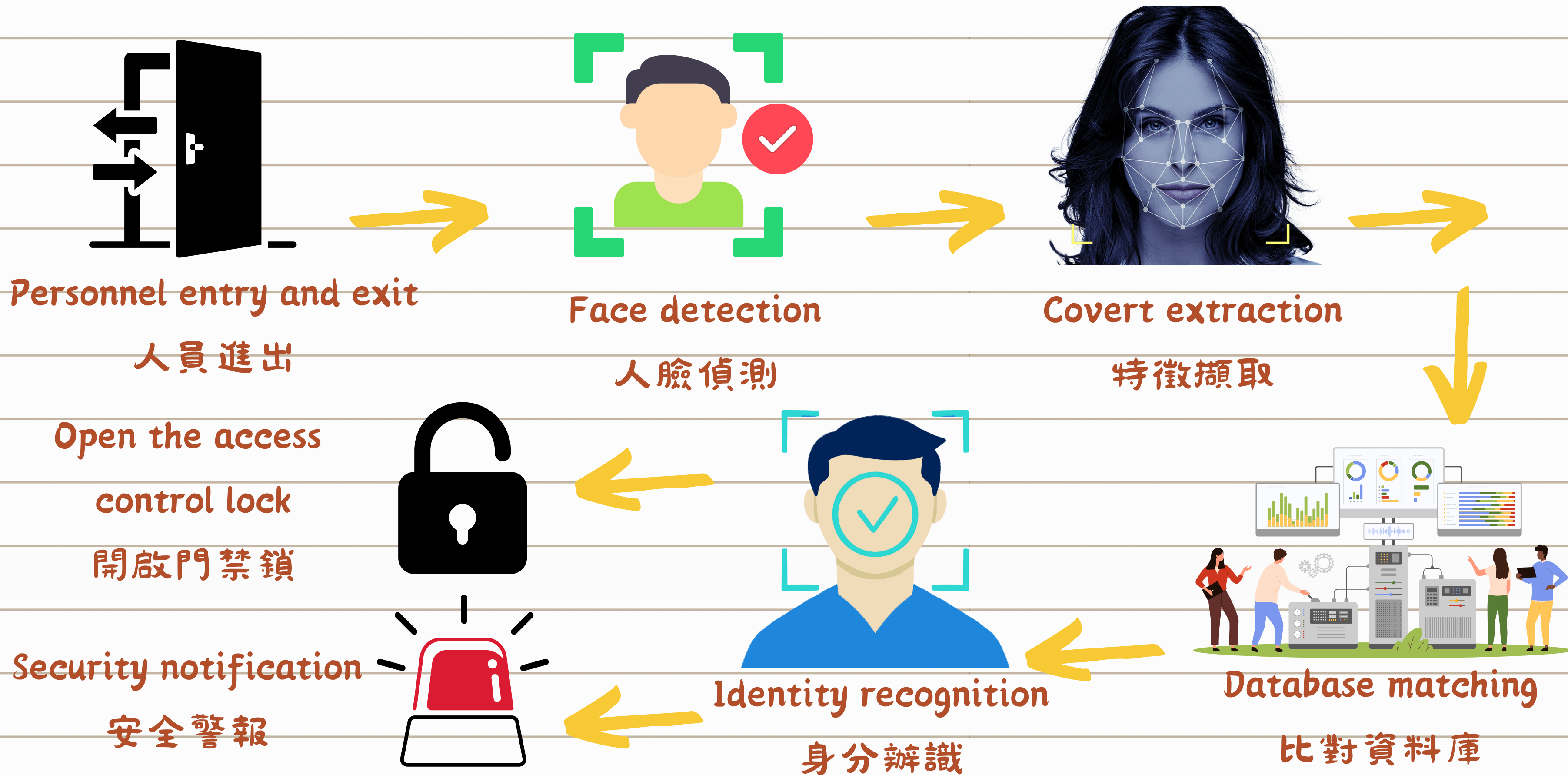
防止外人入侵系統

Green energy on campus

校園綠色能源



# External intrusion system diagram 外人入侵檢測系統圖



# 1. Facial Recognition 人臉辨識

1. Teacher and students of our school → Pass

2. Parents → Guard room registration

3. Strangers → Authorization required for entry

本校師生 → 直接通行。

家長 → 需在警衛室登記。

陌生人 → 必須獲得授權後方可進入。



## 2. Cybersecurity 資訊安全

1. Data encryption, prevent hacker intrusion



1. 日期加密，防止駭客入侵



# Where to set up the device? 在哪裡設定設備?

We have facial recognition equipment

我們設有臉部辨識設備：

The entrance of our campus

我們校園的入口處



# Burglar alarm system 防盜警報系統



We have alarms at: 我們的警報位置為:



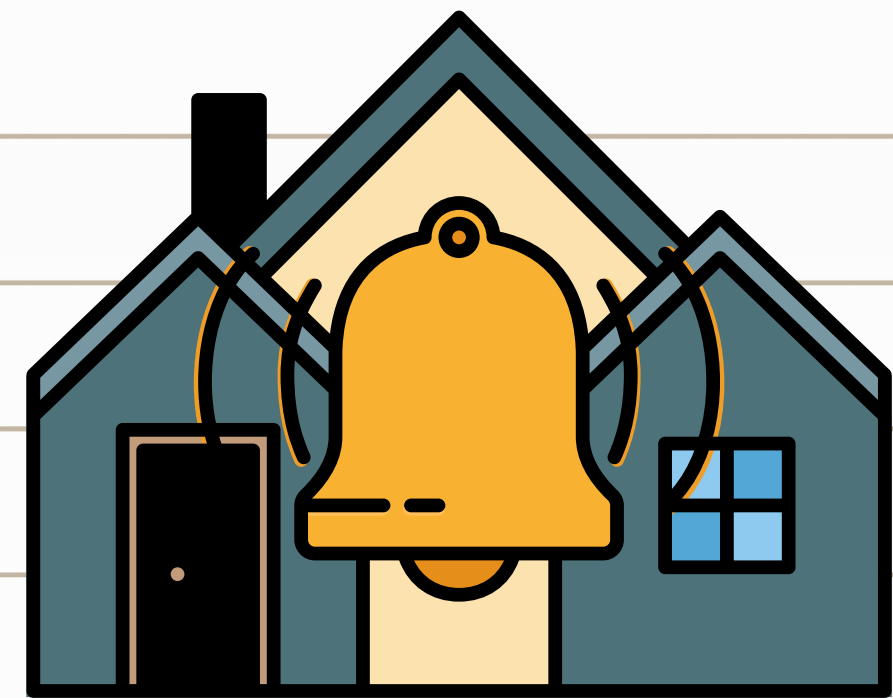
1. Entrance 出入口

2. Classroom 教室

3. In campas 校園內

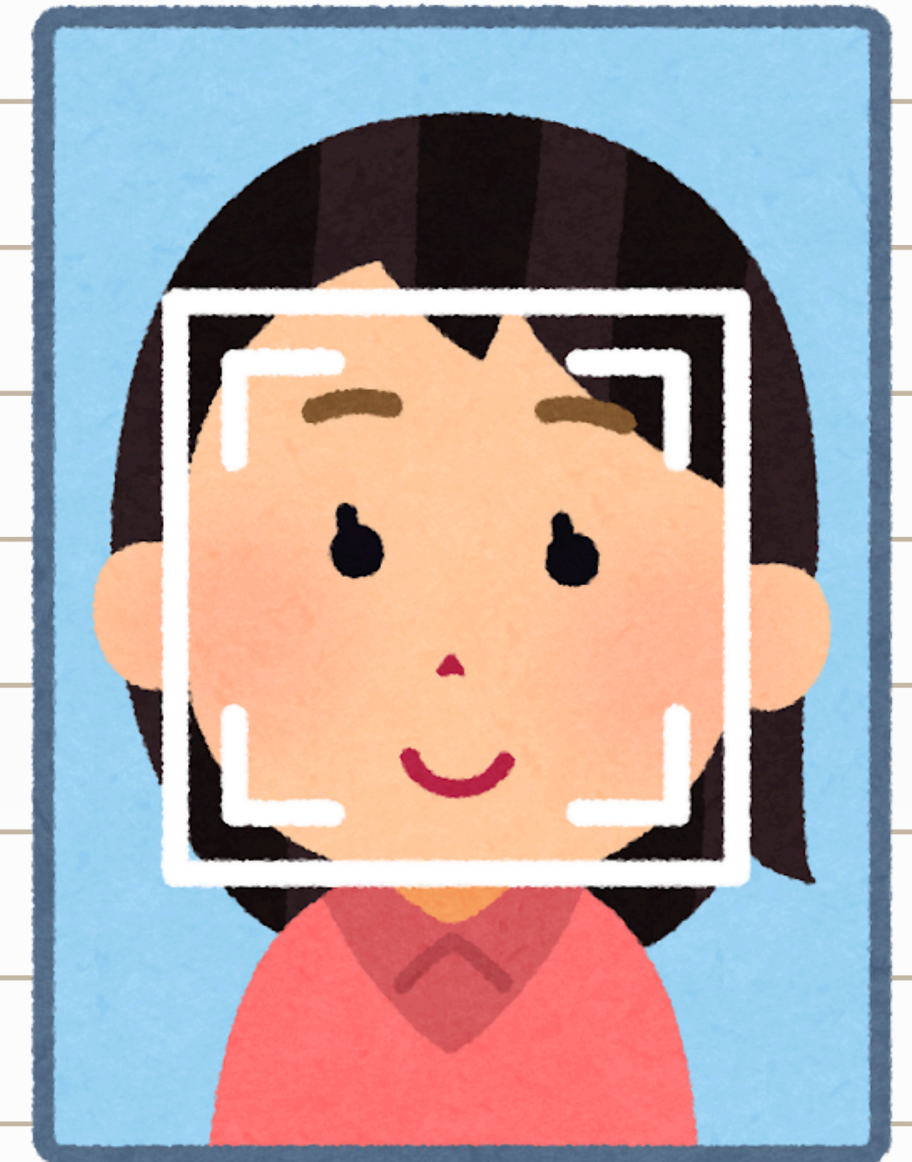
When a stranger enters, the alarm will sound.

當有陌生人進入時警報會響起



We do face recognition in various ways.

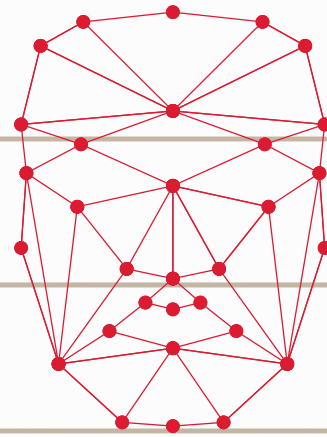
我們透過多種方式進行人臉辨識。



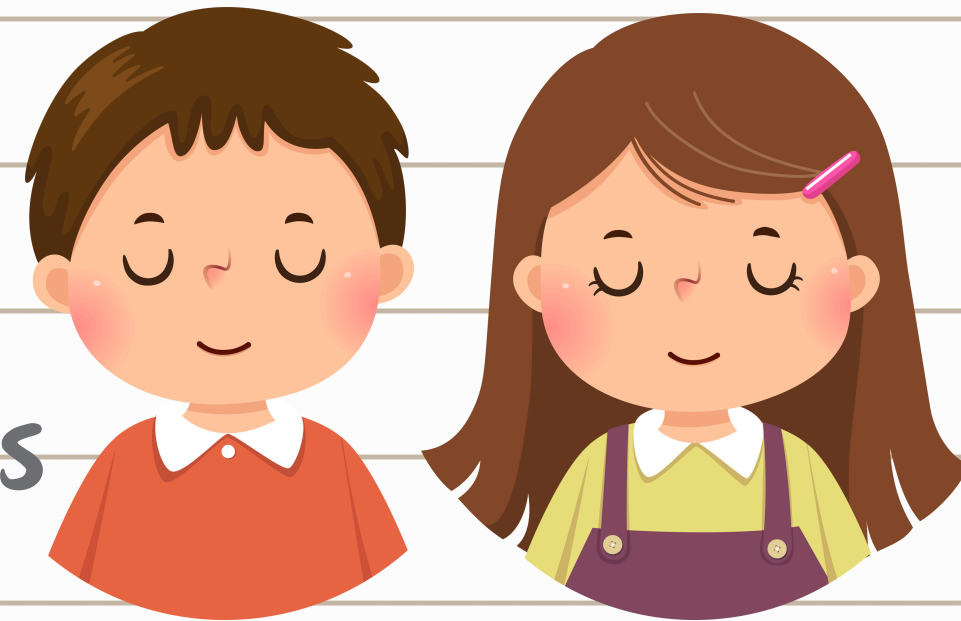


# (1) Facial Structure 面部結構

1. 臉部輪廓 Facial Contour



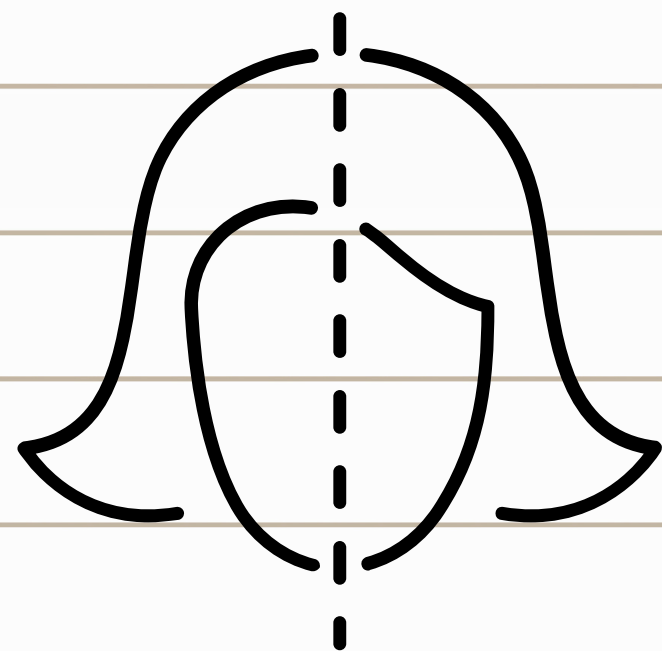
2. 五官的位置 The position of the facial features



3. 五官的比例 Proportions of facial features

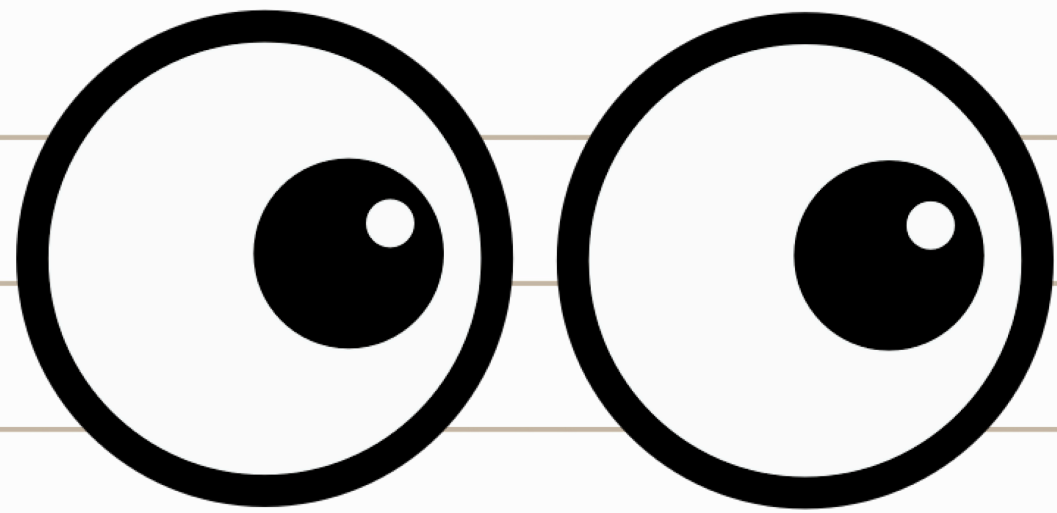


4. 對稱性 Symmetry

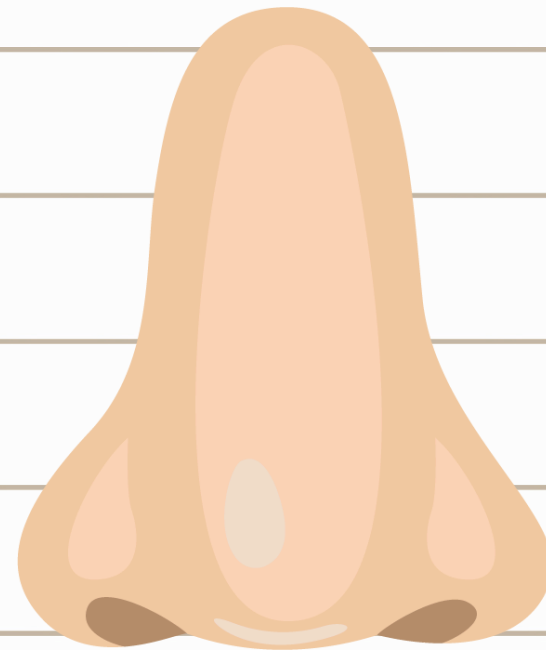


# ( 2 ) Facial Feature Details 五官細節

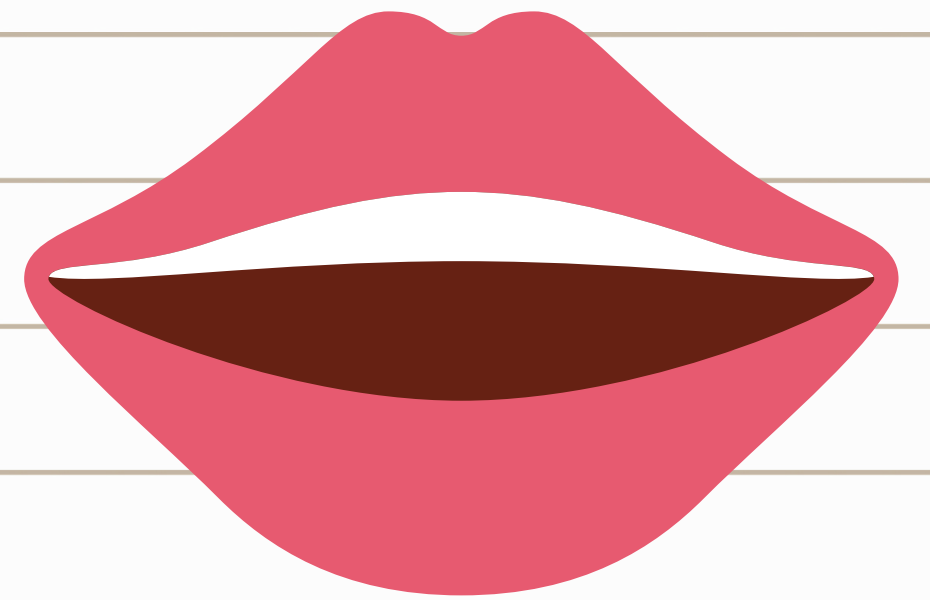
眼睛 Eyes



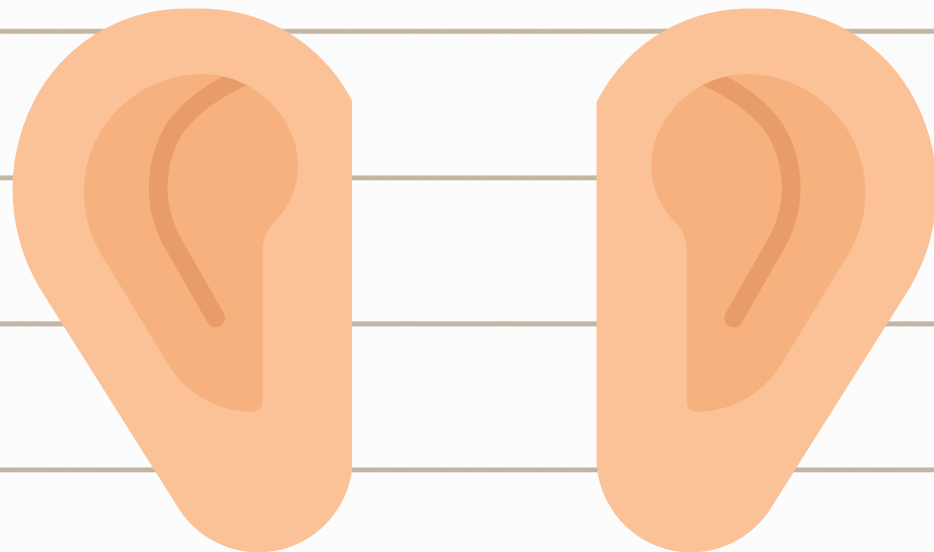
鼻子 Nose



嘴巴 Mouth



耳朵 Ears

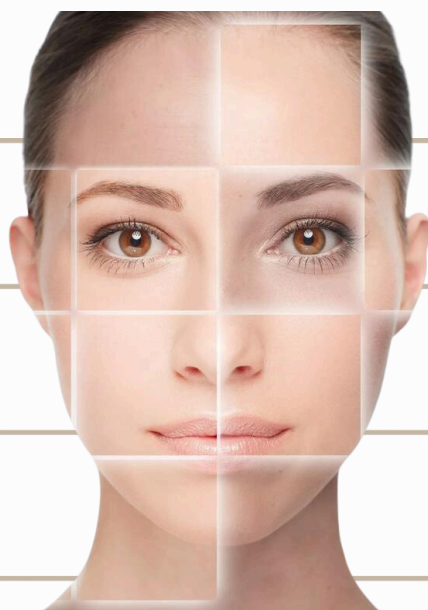


眉毛 Eyebrow

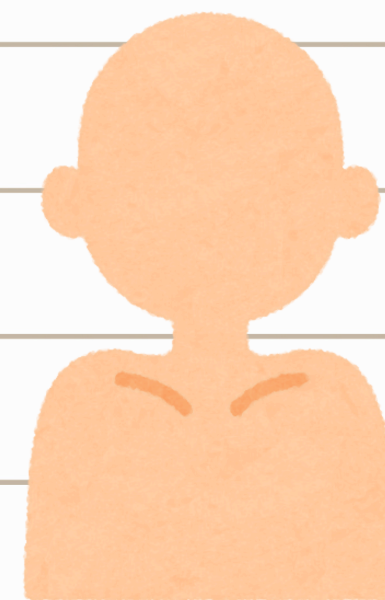
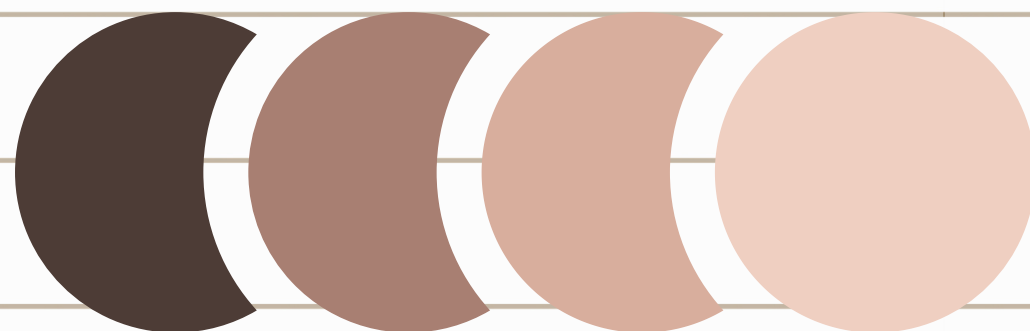


# ( 3 ) The color of the skin 膚色

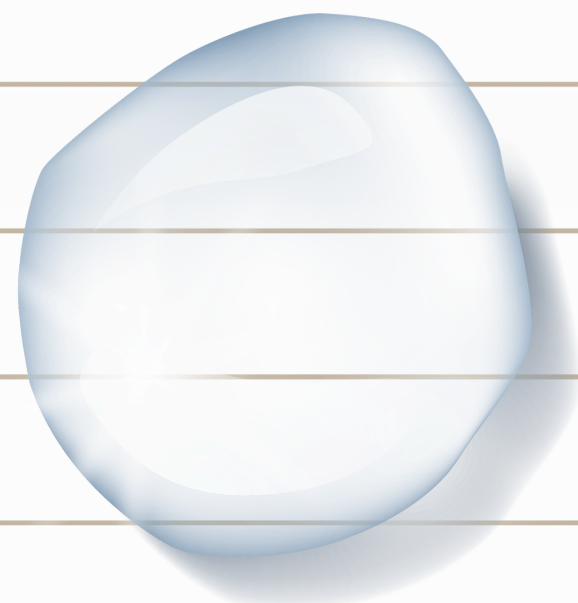
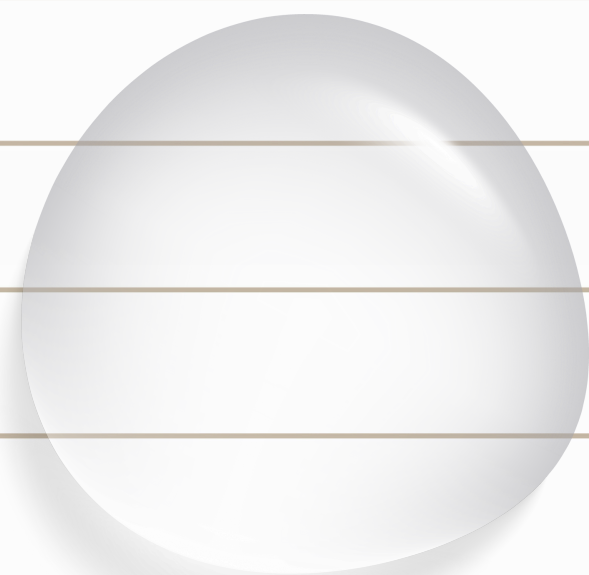
1. Skin Tone Distribution 膚色分布



2. Color Consistency 色彩一致性



3. Skin Transparency or Glow 皮膚透明感



4. Hue Variations 色調差異



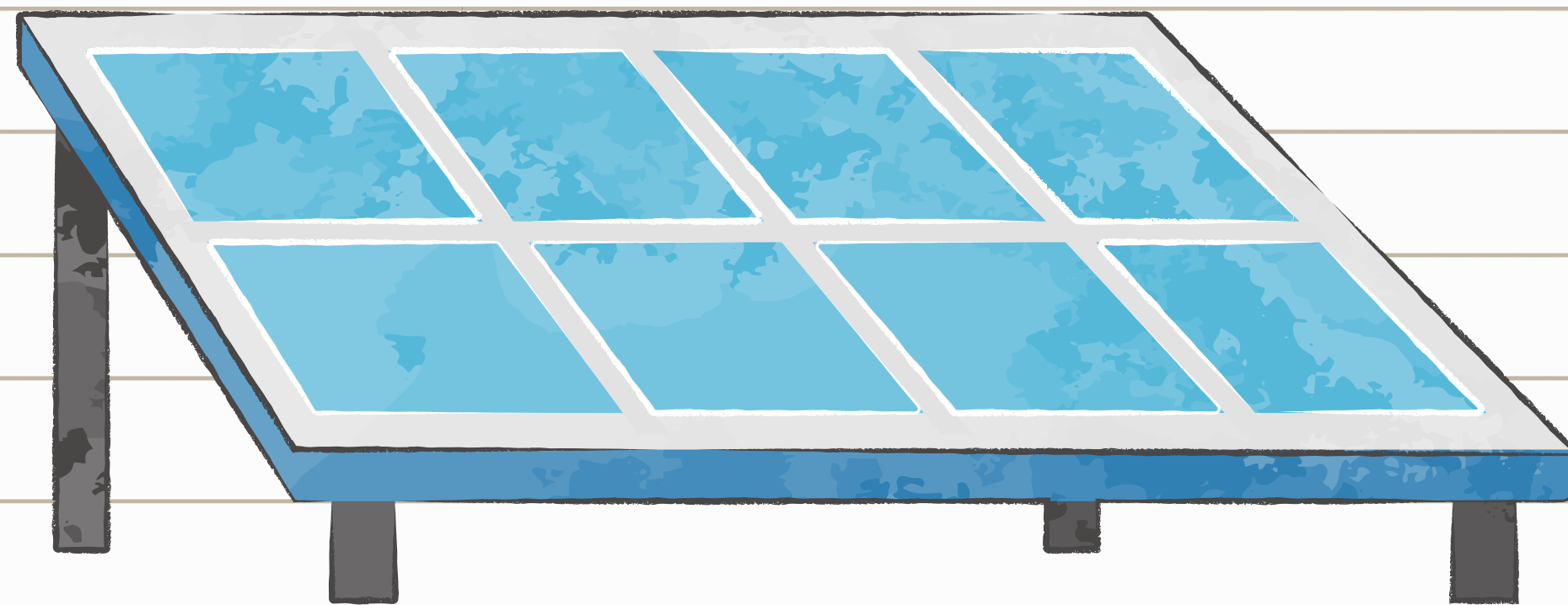
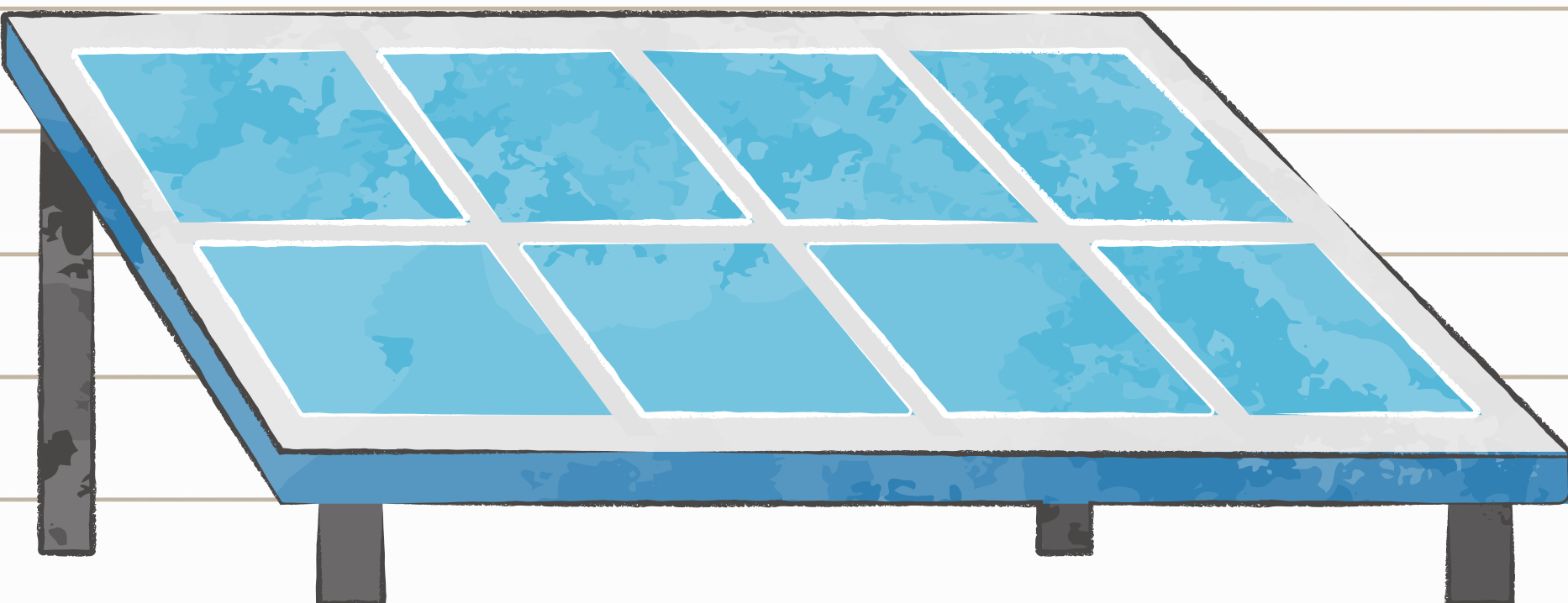
# Green energy 綠能

Our school currently uses solar energy.

There are many solar panels on each teaching building

我們學校目前用的是太陽能，

在每棟教學樓上都有許多的太陽能板

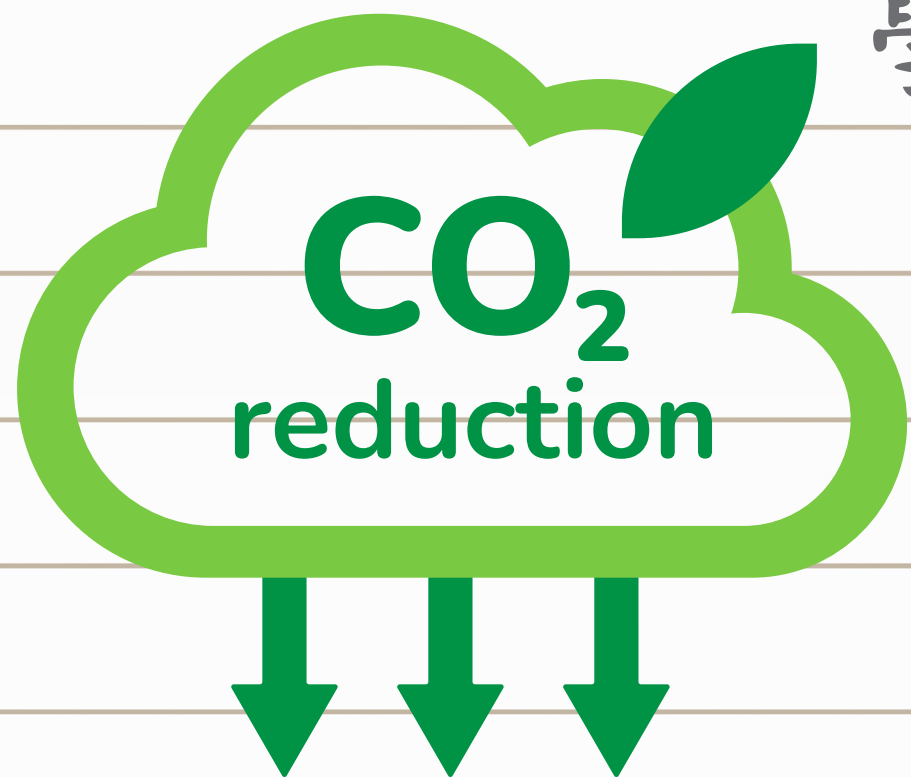


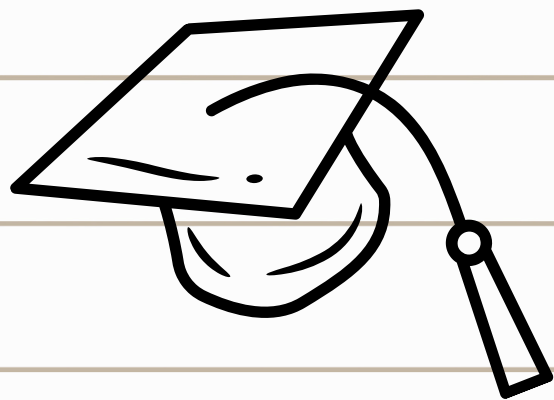
# Green energy 綠能

Solar energy is a renewable energy that can not only reduce carbon emissions , but also become a practical field for students to learn green energy.



太陽能是一種再生能源,不僅能降低碳排放,更能成為學生學習綠色能源的實踐場域。





# Thank You

