

Wild Weather Shelters

極端氣象避難所

Extreme conditions

Extreme weather or extreme climate events include unexpected, unusual, severe, or unseasonal weather; weather at the extremes of the historical distribution. Students explored different natural disasters and weather events that happen here in Taiwan and around the globe such as tsunamis, earthquakes, typhoons, tornadoes, landslides, floods etc. The students made connections to how these disasters are linked to human caused climate change.

Protecting ourselves

Together the students brainstormed ways to combat and ultimately try and stay safe in the event of these extreme conditions. Research was done to see how hurricane houses and earthquake proof buildings are constructed as well as preventative measures against storm damage. The students were tasked to build a shelter that would be able to withstand weather and protect people in the event that such severe conditions would impact us.

Create and test

Different designs and materials were available to construct prototypes of a weather shelter. Students were constantly updating and improving their shelters to meet the testing requirements. Learners were very creative and displayed tremendous engineering skills as they created shelters for these extreme conditions we currently face.

極端現象

極端氣象或極端氣候事件是指預料外、異常、嚴重或非季節性氣象；即歷史紀錄上的極端氣象。學生探究台灣和全球各地發生的各種自然災害和氣象事件，例如海嘯、地震、颱風、龍捲風、土石流、洪水等。學生將這些災害與人類造成的氣候變化連結。

保護自己

學生腦力激盪如何抵抗這些極端氣候，並保護好自己。他們研究如何建造抗颶風的房屋和抗震建築物，以及對於暴風破壞的預防措施，接下來的任務是建造一個能夠抵抗惡劣的氣象情況並保護人們的避難所。

創造與測試

學生使用不同的設計和材料來建構避難所的原型，並不斷地更新和改進他們的避難以滿足測試要求。他們的設計富有創造力，並展示了出色的建構技巧，為我們現在所面臨的極端狀況創造了避難所。

1

ASK + IMAGINE
提問 + 創思

2



We researched and discussed how we could solve the problem of keeping people safe during extreme weather.

我們研究並討論如何在極端氣象下確保人們的安全。

4

CREATE
創造

We had to be clever with our designs, they had to be strong and keep water out.

我們必須精確地設計避難所，要堅固且防水。



3

PLAN
計畫

3



During planning we designed shelters that could withstand 3 different conditions.

在計劃時，我們設計了可以承受三種不同氣象狀況的避難所。

5

IMPROVE
改進

Our shelters went through rigorous testing and areas for improvement were highlighted.

我們的避難所經過嚴格的測試，並強調需要改進的地方。



6

PRESENT
展現

Strengths and weaknesses of the shelters were discussed as we reflected on the process.

在反思時，我們討論避難所的優缺點。