

November, 2025

## **UV Light Shelter**

紫外線防護罩

#### Introduction

The Sun gives off special light called UV light that helps our bodies make vitamin D to keep our bones strong. UV light can even kill germs! Too much UV light can hurt our skin, so we use sunscreen, hats, and sunglasses for protection. As astronauts travel to the Moon and Mars, scientists are working on new ways to protect them from the Sun's strong UV rays.

#### **Creating a UV Light Shelter**

Embarking on a space mission, our young scientists and engineers took on an exciting challenge — protecting an astronaut from harmful UV rays! Working in teams, they tested different UV-blocking materials and built small protective shelters. To track UV light, students created mini astronauts with color-changing beads that showed when sunlight was too strong. After testing their shelters outdoors, they analyzed the results, shared ideas, and brainstormed ways to improve their designs — just like real STEAM innovators!

### 介紹

太陽會釋放一種名為紫外線的特殊光線,它能幫助我們的身體製造維生素 D,讓骨骼 保持強健。紫外線甚至能殺死細菌!然而,過多的紫外線會傷害皮膚,因此我們需使用防 曬乳、帽子和太陽眼鏡來保護自己。隨著太空人前往月球和火星,科學家們也正努力研究 新的方法,以保護他們免受太陽強烈紫外線的傷害。

#### 創造紫外線防護罩

踏上太空任務,我們的小小科學家和工程師們迎來一項刺激又有趣的挑戰:保護太空 人免受有害紫外線的侵害!大家分組合作,測試各種不同且能阻擋紫外線的材料,並創造 小型防護罩。為了追蹤紫外線,學生利用可以變色的珠子來創造迷你太空人,以用來顯示 陽光何時過於強烈。在戶外測試防護罩後,他們分析結果、分享想法,並集思廣益以改進 設計,他們就像真正的 STEAM 創新者一樣!

> Read More Newsletters 點這裡看更多期刊 CLICK HERE -



#### **ASK + IMAGINE** 提問 + 創思



We explored the materials and collaborated to draw our UV light shelters. 我們探索各種材料,並合作繪製紫外線防

護罩的設計圖。

**PLAN** 

計畫

We learned about UV light, how it affects us, and the different ways we can protect ourselves from it.

我們學習紫外線、瞭解它如何影響我們,以及 用不同方式來保護自己。













We constructed our UV light shelters by following our plans. 我們依照設計圖創造紫外線防護罩。















# IMPROVE 改進



We tested our shelters in the sun and improved our designs. 我們在陽光下測試防護罩,並改進設







