

MINECRAFT & SCIENCE

EXPLORING THE INTERNATIONAL SPACE STATION

VERSION 1.0

Lesson 7

Plants vs. Gravity

PLANTS AND GRAVITY

- How does gravity affect plant growth on Earth? In space?
 - Plant stems grow upwards toward light and away from Earth.
 - Plant roots grow away from light and towards the earth.
 - In space plants grows in all directions.
- How can astronauts mimic plant growth in space when there is less gravity?
 - They create a plant growing system using red, blue and green LED lights and a pillow that gives the plants their nutrients.



HOW DO PLANTS KNOW WHICH DIRECTION TO GROW?

HOW ASTRONAUTS GROW PLANTS IN SPACE



BUILDING A MINECRAFT GARDEN

- In Minecraft we can grow plants and crops.
- A few items are recommended to build a garden or a farm.
 - Tilled dirt (Right-click on dirt with a hoe)
 - Water buckets
 - Flowers, seeds, or crops



MINECRAFT GARDENS AND FARMS



STUDENT ACTIVITY

- Design and build a container that can grow plants in space.
- Once finished, the teacher will review and approve your design.
- Your container must be built aboard your space station.



END OF LESSON 7