

Year 2 Spring 1 - Computing – International Space Station



Big Question

Is it possible to grow plants in space? How?

Key Vocabulary for the unit:

Astronaut: Someone who is trained to control a spacecraft.

Data: Information used for a specific purpose or investigation

Digital Content: Information and media such as videos and pictures stored on a computer.

Interactive map: A digital map which can be searched, zoomed in or out of and provide information about a place.

International Space Station (I.S.S.): A laboratory in space that orbits the earth.

Laboratory: A place where scientists carry out experiments to discover more about something.

Satellite: A computer that orbits the Earth to provide information or communication services.

Sensor: A tool or device that is designed to monitor, detect and respond to changes.

Thermometer: A device that measures and displays the temperature of something using a scale (*C or *F)

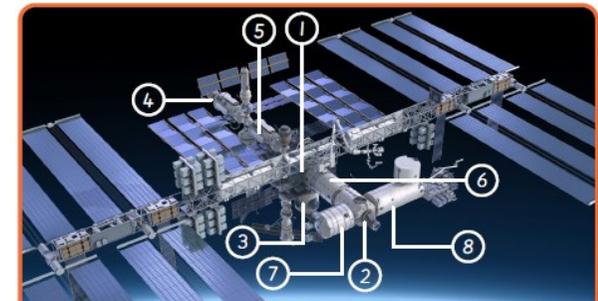
Powerful knowledge/skills for this unit:

- ◆ To understand that you can enter simple data into a spreadsheet.
- ◆ To understand what steps you need to take to create an algorithm.
- ◆ To know what data to use to answer certain questions.
- ◆ To know that computers can be used to monitor supplies.

What I should already know from Year 1:

- ◆ To know how that charts and pictograms can be created using a computer.
- ◆ To understand that a branching database is a way of classifying a group of objects.
- ◆ To know that computers understand different types of 'input'.

Useful diagrams for the unit:



1	Node 1 (Unity)	Connects U.S. and Russian modules of the I.S.S.
2	Node 2	Connects the American, European and Japanese modules.
3	Node 3	Sleeping and resting area.
4	Zvezda (Star)	Central hub for Russian astronauts.
5	Zarya (Sunshine)	Russian research module.
6	Destiny	American research module.
7	Columbus	European research module.
8	Kibo (Hope)	Japanese research module.

Growing plants in space



The Vegetable Production System, known as 'Veggie' is a device used to understand and support plants to grow in space on the I.S.S. It helps produce fresh food for the astronauts.



