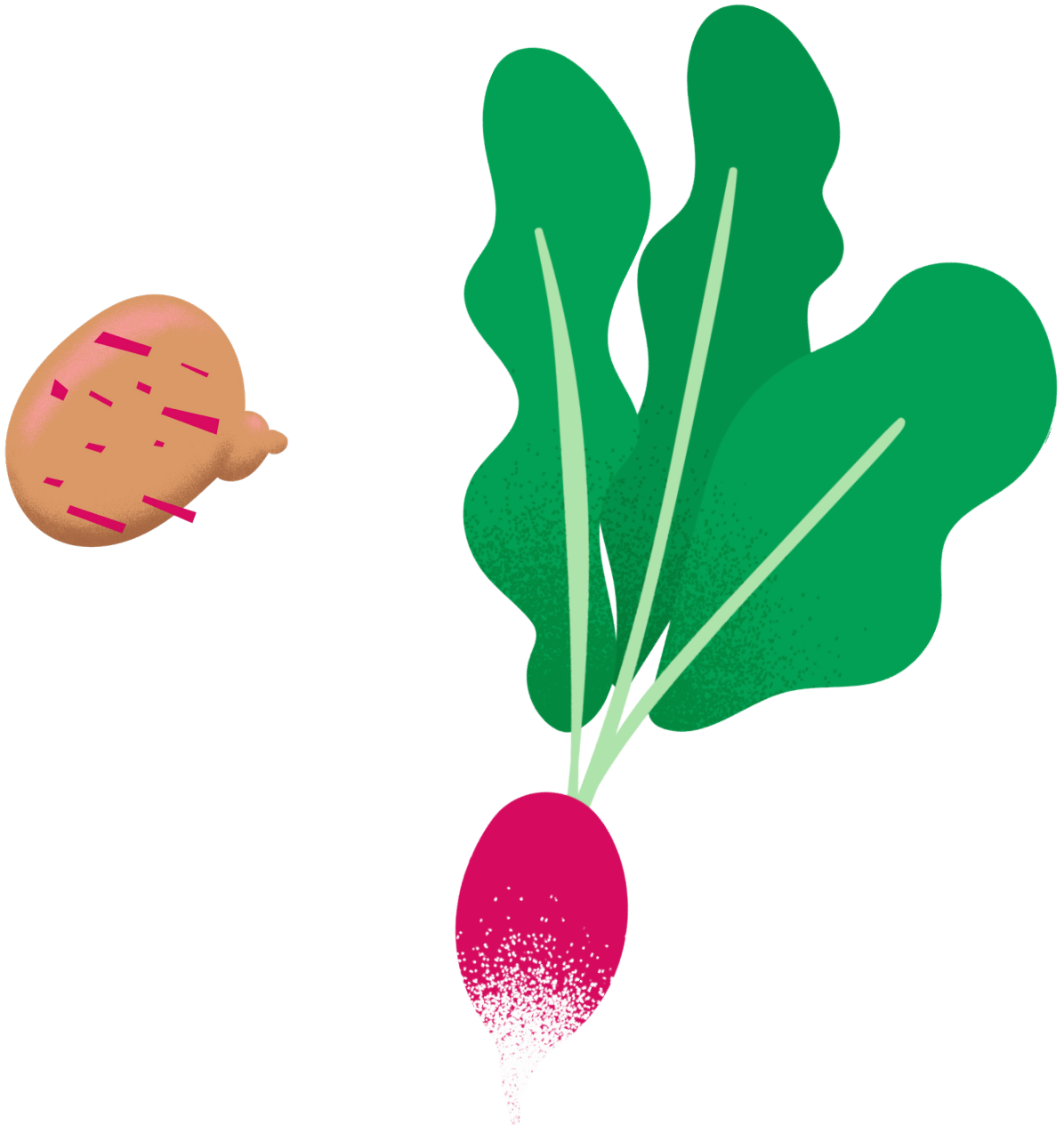


Planetary Tubers

Year 3 – Science, Maths

Year 5 – Science, Maths



(Science; Yr 3, ACSSU048)

Earth's rotation on its axis causes regular changes, including night and day

(Science; Yr 5, ACSSU078)

The Earth is part of a system of planets orbiting around a star (the sun)

Planetary Tubers

Travelling deep into Tuberspace!

Just how far apart are the planets really? In this lesson students build a scale model of the solar system with Tuberman, our resident all-seeing space potato, as their guide (he's got plenty of eyes to go around).

Equipment:

A long tape measure, preferably a wheel tape measure of 40-60m length

A bag of mixed potatoes, carrots, beets, radishes and other tubers (small and large)

A4 paper, each sheet with the name of one of the planets in the solar system

A diagram of the solar system for reference

AV equipment (optional)

Duration:

45 minutes

Location:

Outside, in an open space such as the oval or football pitch

Notes:

Speaking of Potatoes...

👁 Watch **The One with the Space Potato**



I was born on
the Space Shuttle
Columbia in 1996...

? Discuss:

- ◇ Who is Tuberman?
- ◇ Where does he come from?
- ◇ What sort of person/character is he?
Would you like to spend time with him?
- Ask students to find the definition of 'tuber' for you. Who else might have been out in space with Tuberman?



Taking it to Space

- Students are going to use the tubers to create a model of the solar system. The aim of the lesson is to illustrate the huge distances between planets.
- Start with the sun, choose a tuber from your bag that will represent the sun (this may begin with a discussion of what size the sun is compared with everything else).
- Begin measuring, marking and placing the rest of the planets in the solar system, naming them as you go.
- Students record their solar system model in video and still photos.
- Back in the classroom and in a future session, students create fact sheets about each of the planets. Alternatively they could investigate the Space Shuttle Columbia or other space missions, past and present.

* Pluto was downgraded from its planet status, so you may not want to include it in the solar system model. A debate is raging about the definition of a planet, with many scientists saying it (and 101 other celestial bodies) should be reclassified as planets, which would give us 110 planets in total. You could use this as a teaching point to show that science is about continually revising information and classifications, or create your own class debate advocating for/against the expansion of our Solar System.

See Resources for a neat little article to get students started on this.

Resources

- ◇ Exploratorium – Solar System Scale Model Calculator: http://www.exploratorium.edu/ronh/solar_system/
- ◇ NASA Scientists want Pluto to be a Planet Again: <http://www.wired.co.uk/article/is-pluto-a-planet>
- ◇ Space Station Columbia (1991): <https://www.wired.com/2012/03/space-station-columbia-1991/>

	distance from Sun:
Sun	0
Mercury	0.42m
Venus	0.78m
Earth	1.07m
Mars	1.64m
Jupiter	5.59m
Saturn	10.25m
Uranus	20.62m
Neptune	32.33m
Pluto*	42.48m

**Beets, carrots, turnips,
radishes, sweet potato,
parsnips, yams, youlk....
We're tuberiffic!**

