



FOOD

DIFFERENT

by design



national science week 2021

14-22 AUGUST 2021
www.scienceweek.net.au



An Australian Government Initiative



GET INVOLVED!

FOOD

digital teacher resource book
AVAILABLE NOW!

DIFFERENT
by design

The resource book includes lesson plans for Foundation to Year 10, ideas to support students' involvement in investigating, exploring, experimenting, designing, creating and communicating their understandings about how science is involved in food production and sustainable agriculture.

The resource book is complemented by a National Science Week student journal that can be downloaded and printed.

Download the resource book for free from www.asta.edu.au



BRAIN BREAK MORNING TEA

Brain Breaks can be a quiz, group activities or a few quick science demonstrations—anything you want them to be. It's a chance to stop and reflect on the science in your world.



Register your Brain Break by 15 July scienceweek.net.au/brainbreak to receive a FREE National Science Week Brain Break pack including



quiz questions, activity suggestions, coasters and other promotional items. The packs will be mailed out early August.

SCINEMA 2021

From drama to documentaries, animations or epic natural history, at Australia's Science Channel we're passionate about the power of the moving image to tell stories about the world, how it works, and our place in it. Register now to host your own free screening of the best of SCINEMA International Science Film Festival this National Science Week. Visit scinema.org.au



WHAT'S ON ACROSS AUSTRALIA

in cities and regional areas?

TO BE WON!!!

Plant Science Safeguarding Our Future Food Security



By the middle of the century there will be almost 10 billion people on Earth – an awful lot of mouths to feed, especially when a warming climate makes agriculture more challenging. Scientists may save the day by helping crop species adapt and thrive as growing conditions change. The Australian Society of Plant Scientists is organising visits to laboratories and field sites across the country.

Department of Defence

Download a free education resource pack about Food: Different by Design for National Science Week and submit your entry to win one of 3 Scientific Equipment prizes for your school. More info: <https://www.dst.defence.gov.au/event/national-science-week-2021>

Evaluation of events

AFTER NATIONAL SCIENCE WEEK TELL US HOW IT WENT!

Complete the online feedback form before Monday 13 September 2021 at <https://www.surveymonkey.com/r/R63LLKK> and your school could WIN a \$50 or \$100 online shopping voucher!

ACT

The role of AgTech in reducing food waste

Canberra

Fiftysix Creations will run workshops to inspire and educate up to 150 young people from ages 12-24. Participants will have the opportunity identify problems on how to reduce wastage in food and vegetable systems and brainstorm STEM-related solutions. At the conclusion of each workshop, participants will have the opportunity to pitch their ideas and network with inspiring professionals from the AgTech industry.

NSW

STEAM Ahead: Foodlovers

Western Sydney Parklands

There's not much in life that isn't covered by food and science and you'll find both in Western Sydney Parklands. STEAM Ahead Foodlovers will combine Aboriginal and science educators and The Urban Farms with Sydney's leading science institutions – and people who just like to eat – to explore Australia's traditional food sources, the science of food production and the latest research in food recycling.

Riverina Science Festival

Wagga Wagga

Paint a portrait of a parasite, join the fun at a Nerd Night or be challenged the future foods of deep-fried grasshopper or cockroach flour bread. The festival includes activities for all age groups, including a Food Odyssey, science for pre-schoolers, talks from plant scientists, sustainable gardening, and Indigenous science and engineering.



NT

desertSMART EcoFair

Alice Springs

Gardening Australia's Costa Georgiadis will be part of on Alice Springs for the desertSMART EcoFair, Central Australia's premiere science and sustainability event. The event will feature desert scientists, Indigenous educators, renewable energy professionals and health experts encouraging discussions about science and sustainability.

HealthLAB: Science on Wheels

Darwin, Bathurst Island and Arnhem Land

HealthLAB will travel around Darwin, the remote island community of Wurrumiyanga and to Ramingining in Arnhem Land to work with trainee Aboriginal Health Practitioners on country. The people they visit will see ultrasounds of their heart and kidneys, hear their heart beating, see how the heart changes after exercise, and try on 'alcohol goggles' that mimic raised blood alcohol levels.

QLD

CQ Festival of Food: the scientific processes involved in food

Central Queensland

The CQ Festival of Food highlights what is being done through a series of engaging scientific experiments for students and the broader community. Industry, the education sector, and university experts will work together to develop the content, giving people a unique opportunity to explore the science of Bundaberg food production, Gladstone's fisheries, the Rockhampton beef industry, Mackay sugar production, and more.

Actually, it's Phytoplankton! Planet Ocean

Toowoomba and online

How does the oceanic food web work? How does light behave in water? Or, did you know the ocean is an incredible climate machine? – these are some of the topics and episodes of 'Planet Ocean', the second season of the podcast 'Actually, it's Phytoplankton!'

Host Jamie Coull, and oceanographer co-hosts Lachlan McKinna and Ivona Cetinic present six lessons via podcast, with resource packs for primary and middle school students.

SA

Seeing Things Differently – The science behind X-ray imaging

Adelaide

How does X-ray imaging work? How is it different to photography? And how will it change in the future? Find out about X-rays and see the high-tech equipment involved, without breaking an arm or leg. This series of events will give people the opportunity to see inside Adelaide's Micro-X factory, which develops and produces new generation X-ray imaging equipment incorporating innovative design and carbon nanotube technology.

Donut Shooting Robots – Feed your senses

Adelaide

Who can design, build, and operate the ultimate goal-shooting robot? The SA Student Robotics Club will run a Robot Scrimmage in National Science Week – a program of robotics education, workshops, fun and learning. More than 15 Scrimmage Teams will take on the challenge to design, manufacture, assemble and program robots.

TAS

Young Tassie Scientists: Sharing local research across our island

State-wide

Meet Young Tassie Scientists this August. Matt the 'raven-mad' bird scientist, Allanna the bioinformatician, Dipon the cheesy microbiologist, and Shasta the entomologist who can tell you all about bugs and why we should eat them. These are just a few of the Young Tassie Scientists team – passionate early career researchers who bring STEM presentations and activities to schools and public events state-wide.

Build your own Artificial Intelligence (AI)

Hobart and Launceston

We hear a lot about artificial intelligence – or AI – but how does it really work? And is AI going to take over the world and destroy us all? Using video game technology as an engaging gateway, two sessions for the young and young-at-heart will show people how AI really works, focusing on the inputs and sensors AI can use to perceive its environment, and the impact it can have on the world it exists in.

VIC

Immersive Science V (SciVR): A virtual Universe for Australians everywhere

Venues nationally

See the stars, fly by Jupiter's red spot, and delve into the latest gravitational wave research – all without leaving town. Astrophysicists Prof Alan Duffy and Dr Rebecca Allen return to share the latest wonders of Australian-led astronomy research through SciVR, an immersive astronomy experience enabled by a virtual reality (VR) smartphone app. Guided by Alan and Rebecca, 75 regional science centres, observatories and libraries will transform into virtual exploriums.

Human Change, Not Climate Change @ Phillip Island Nature Parks

Facebook Live

How are seals, penguins and people adapting in a climate crisis? Phillip Island Nature Parks presents a discussion between marine scientists Dr Rebecca McIntosh, Associate Professor Andre Chiaradia and PhD student Lauren Tworkowski. The conversation will focus on the impact of a changing climate on iconic native species – little penguins and Australian fur seals – and explore the science and conservation actions at the Nature Parks that aim to understand and mitigate these impacts. This event is part of Inspiring Victoria's ACCLIMATISE program for National Science Week.

WA

MicroToons Launch Event

Perth

Come celebrate the launch of MicroToons, an animated science cartoon based on a short story written by Dr Rina Fu. Hosted by 4LifeSkills, the event will highlight the behind-the-scenes adventure involved in creating the cartoon, with a stage show, popcorn, and interactive science fun that are inclusive for all ages and abilities.

Who's Singing Underwater?

Katanning

Under the guidance of Katanning Landcare's environmental scientists – plus local expert David Secomb – participants will visit two local waterbodies and learn just how much life is lurking beneath the surface. Using a hydrophone (underwater microphone), participants will listen to the cacophony of sounds, and use macroinvertebrate sampling techniques to identify the range of species present.

Visit scienceweek.net.au for more information and to find other events near you.