

# Junior Field Naturalists SA

Newsletter - May 2021

Hi Junior Field Naturalists,

## May Meeting

**When:** Tuesday 25 May, 7.00pm, in the Gym of the **Bellevue Heights Primary School**

**Topic:** FROGS

**Overview:** Find out about the different species of frogs in the region and how to get involved in the **FrogWatch SA** citizen science program. Our speaker will provide tips on identifying the different frogs, recognising them by their calls, and the weird and wonderful things some of them get up to.



**Speaker:** Our speaker is frog expert **Steve Walker**. Steve has had a lifetime interest in frogs and other wildlife. He currently works for the Adelaide and Mount Lofty Ranges Natural Resources Management Board's Education Team and he has significantly contributed to community frog monitoring programs in South Australia. Steve also co-authored the book "*Frogs of South Australia (Third Edition)*" with Associate Professor Mike Tyler. Through decades of work identifying records of frog calls from around the state, his verifications have contributed a huge amount of scientific data on South Australian frog distributions.

Being a key member of the **Frog Watch SA** partnership, he has developed valuable educational resources, provided training for citizen scientists, and given hundreds of presentations to a diverse range of educational institutions and community groups. *His distillation of the science into entertaining anecdotes suitable for young and old makes him a popular science communicator who lives his passion.*



# Program of Talks and Activities

Below is our current schedule of dates for 2021. We will be including more activities as the year progresses, so this list will be updated as we lock in additional dates and programs.



Monthly meetings are held at 7pm in the **Bellevue Heights Primary School Gym**.

*Have a particular topic or field trip you would like us to include? Let us know and we'll see what we can do to make it happen.*

25 May - Steve Walker: **FROGS**

**Sunday 13 June: BIRD BANDING FIELD TRIP (Newland Head Conservation Park)**

**Sunday 27 June: FUNGI FORAY FIELD TRIP (Belair National Park)**

29 June - tba

27 July - tba

31 August - tba

21 September - tba

26 October - tba

30 November - **DAVID CHRISTOPHEL MEMORIAL QUIZ NIGHT**

*Parents attend meetings and field trips with their children and are responsible for their supervision.*



## 2021 Junior Field Naturalists SA Committee

Following our recent AGM, the following form our committee for 2021:

**Rona Sakko**, President

**Lou Petherick**, Secretary

**Michele Hamdorf**, Treasurer

**Joel Catchlove**

**Kirstie Morandell**

**Wendy McKeown**

**Michele Leopold**

**Cameron McDonald**, Quiz Master

**Prof Chris Daniels**, Patron of Junior Field Naturalists SA

*Welcome to our new committee members - and we look forward to your valuable input into the Club.*



*The following might be of interest to club members:*

## Australian Space Discovery Centre

The **Australian Space Discovery Centre** is now open! Explore the latest innovations in space technologies as you learn about Australia's role in expanding national and international space activities. Designed to spark curiosity and inspire, the Discovery Centre hosts:



- a **Careers Hub** showcasing job opportunities in the local space industry
- an operational **Mission Control Centre**, viewable through a theatrette for live space events, guest speakers and opportunities to engage with space experts
- a **space exhibition** featuring hands-on experiences, models, displays and information on Australia's growing space sector
- information on **STEM education** options for young people to explore pathways for a future in space



*When:* Open to the public from Wednesdays to Sundays. Tickets (not available at door) must be pre-booked online.

*Where:* McEwin building in Lot 14 - entry is off North Terrace, near the Botanic tram stop.

*Cost:* Free

*More Info:* [industry.gov.au](http://industry.gov.au)

## Did you know ...

Pluto is smaller than the United States!

*From thefactsite.com*



# Total Lunar Eclipse



On **Wednesday 26<sup>th</sup> May 2021**, at approximately 8.48pm, Adelaide (and the rest of SA) will experience a **Total Lunar Eclipse**. The total duration of the eclipse from start to finish is slightly over 5 hours. However, the Moon will be in **total eclipse from 8.41pm to 8.55pm**. This is when the Moon will turn reddish in colour, often referred to as a '**Blood Moon**'. This is because the Moon has moved into the 'umbra' of Earth's shadow, which is the darkest part. Moreover, Adelaide is in a prime location to witness this celestial event, weather permitting!



A **lunar eclipse** occurs when the Moon moves into the Earth's shadow. This can occur only when the Sun, Earth, and Moon are exactly, or at least very closely, aligned (the technical term is in 'syzygy') with Earth between the other two, and only on the night of a full moon. The light from the Sun shining on the Moon's surface is blocked, with the exception of some light that has been refracted (bent) by Earth's atmosphere. On the night of the eclipse, the Moon will be approximately 43 degrees above the horizon; so it will be easy to see for most people, even from suburban back yards, and the bonus is it will occur early in the evening.

*Information from Paul Curnow, Astronomy Lecturer, University of South Australia*

***The Astronomical Society of SA will live stream the Total Lunar Eclipse on 26 May.***

A number of imaging telescopes in the Greater Adelaide area, Victoria and elsewhere in Australia will be used to provide the live feed in mitigate the chance of unfavourable weather conditions.

**FREE TO WATCH** **WATCH LIVE**

**The Astronomical Society of South Australia**  
PRESENTS  
A LIVE STREAM OF THE ONLY 2021  
**TOTAL LUNAR ECLIPSE**  
assa.org.au/tle

Multiple Live Telescope Views • Expert Panel Answering Your Questions • Interactive Night Sky Experiences

WIN GREAT RAFFLE PRIZES SPONSORED BY  
Adelaide Optical Centre • Celestron Australia • ASSA

7 - 9pm ACST Wednesday 26 May 2021

WATCH FREE ONLINE

Raffle Fundraiser

Lunar Eclipse Image Credit: Paul Hesse, ASSA



# How Much Does Our Planet Weigh?

- \* Earth is the third planet from our Sun.
- \* Earth's diameter is about 13,000km.
- \* Earth isn't really round. Its spin causes the poles to be a bit squashed and the middle to be swollen.
- \* Over 70% of the Earth's surface is water.

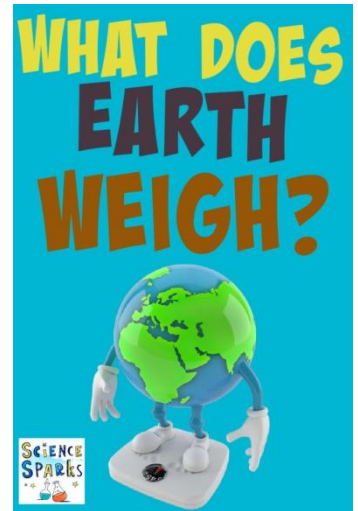
## *How much does the Earth weigh?*

We obviously can't put the Earth on a gigantic scale, so it needs a tricky calculation to work it out.

Scientists calculate how strong the gravitational pull on other planets is to calculate weight. Heavier planets have a stronger gravitational pull. We talk about a planet's mass rather than weight, though - as weight is dependent on gravity - so mass is easier to work out.

You would weigh less on the moon than on Earth as there is less gravity on the moon, but your mass would stay the same.

**The Earth has a mass of 5,970,000,000,000,000,000,000 kg.**



## Interesting Owl Facts

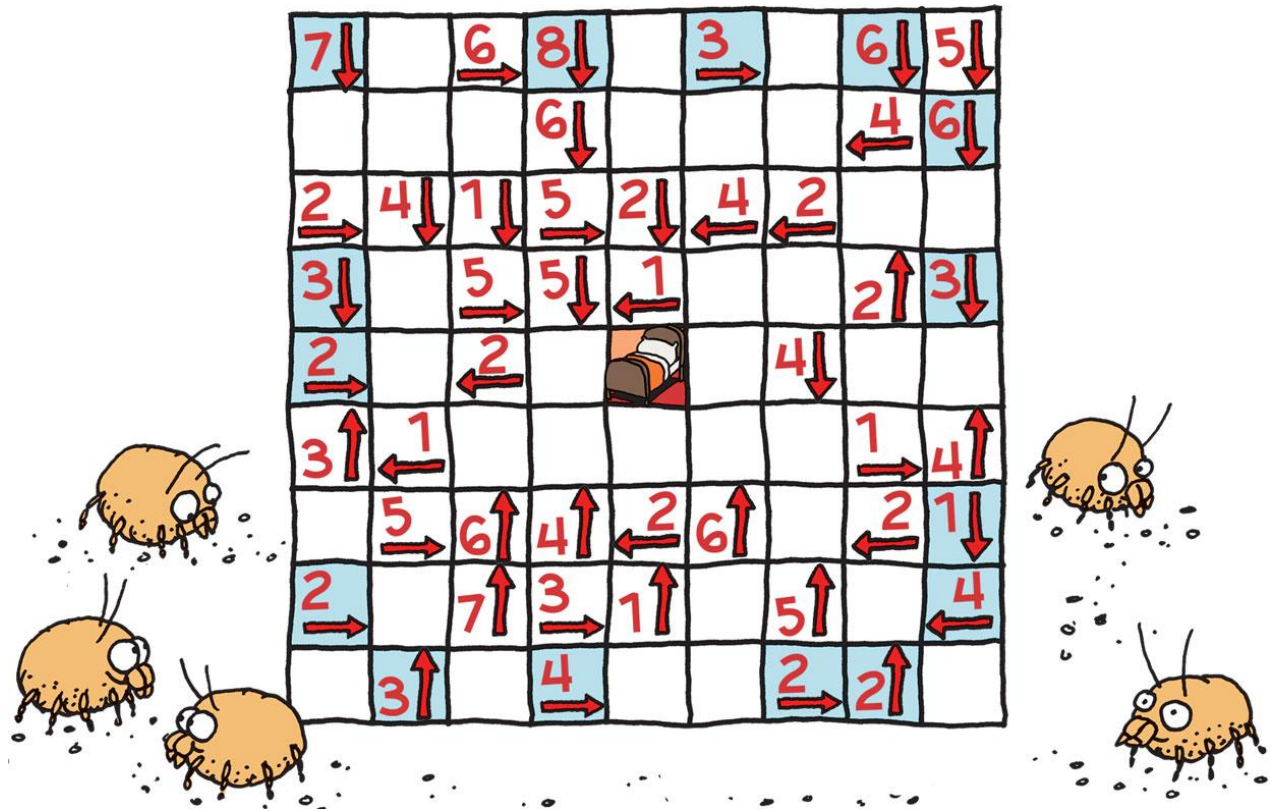
*From sciencekids.co.nz*

- ❖ There are around **200 different owl species**.
- ❖ Owls are **active at night** (nocturnal).
- ❖ A group of owls is called a **parliament**.
- ❖ Most owls hunt **insects, small mammals** and **other birds**.
- ❖ Some owl species hunt **fish**.
- ❖ Owls have powerful **talons** (claws) which help them catch and kill prey.
- ❖ Owls have **large eyes** and a **flat face**.
- ❖ Owls can turn their heads as much as **270 degrees**.
- ❖ Owls are **farsighted**, meaning they can't see things close to their eyes clearly.
- ❖ Owls are **very quiet in flight** compared to other birds of prey.
- ❖ The **colour of owls' feathers** helps them blend into their environment (camouflage).
- ❖ **Barn owls** can be recognized by their heart shaped face.



*Have fun with this brainteaser ...*

### Dust Mite Dilemma



Can you help the dust mites find their way to the bed? The arrows in the squares show the direction they need to go, and the numbers indicate how many squares they need to travel. The dust mites must start on one of the blue squares: but which one?

### Brainteaser hint

You can solve this by trying every starting spot, but it might be faster to work backwards and find all the arrows that lead back to the middle!

<https://blog.doublehelix.csiro.au/dust-mite-dilemma-brainteaser/>

### Our Milky Way Galaxy

Out of all the known galaxies, the **Milky Way** is the one that contains the most stars.

There are approximately **100 thousand million** stars in our Milky Way Galaxy.

*From thefactsite.com*



# What is the Most Poisonous Animal in the World?

From sciencebob.com

"**Poisonous animals**" applies to animals that make you sick if you were to eat them. They may also use their poison as a defence against predators.

**Venomous animals** generally use their venom to stun or kill other animals through a bite or sting.

Despite what you may have heard, the "**Daddy Long Legs**" spider is NOT the most venomous animal at all. Some types are non-venomous and others have very little venom - and they are not even spiders!



So what is the most poisonous animal? That title goes to the **poison arrow frogs** of the rain forest. A drop of their venom the size of a pin head could kill a human. Just holding them is taking a risk on your life.

Luckily they have bright colours to alert you to their venomous status.

By the way, when it comes to VENOM, the **Blue Ring Octopus** is often considered the most venomous.

## Did you know ...

\* The **flea** can jump 350 times its body length. It's like a human jumping the length of a football field.

\* Our **eyes** are always the same size from birth, but our nose and ears never stop growing.



\* No **piece of paper** can be folded in half more than 7 times.

\* **Starfish** have no brains.

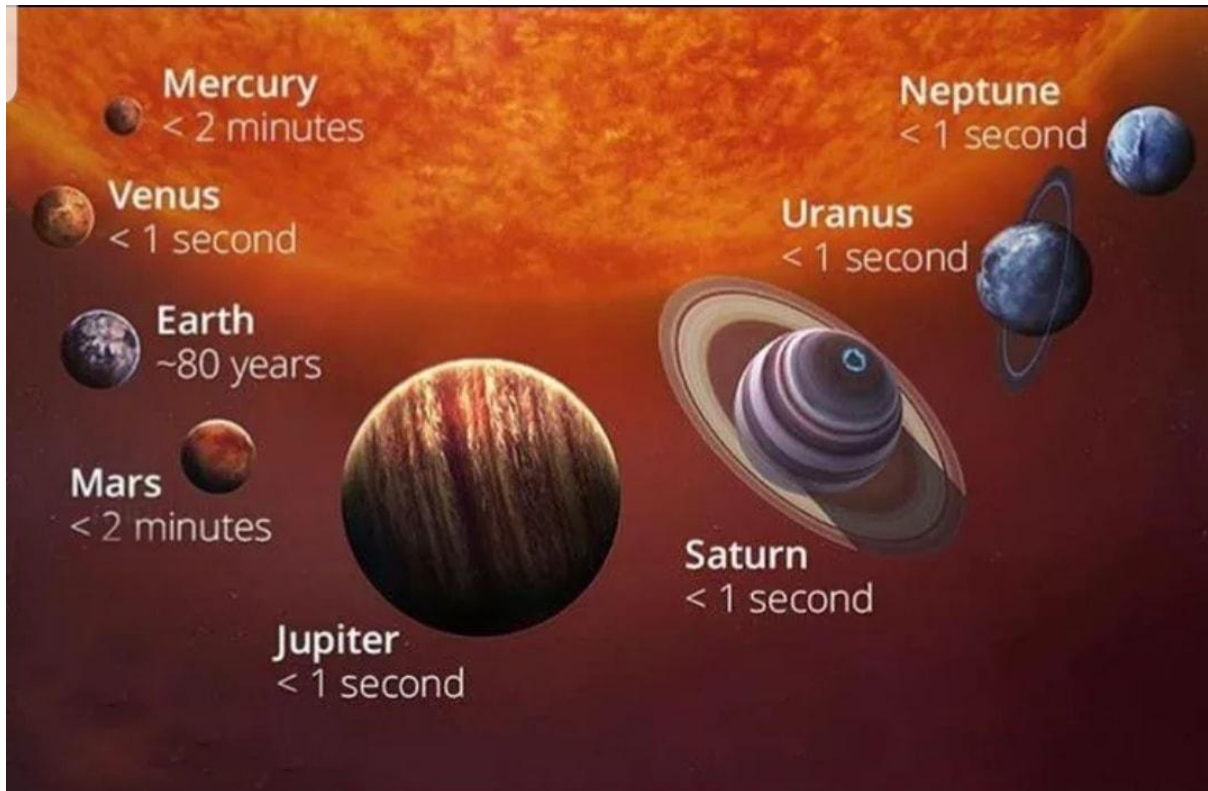
\* The **Earth** reflects 1/3 of the Sun's energy back into space.

\* Did you know that pineapples, oranges and tomatoes are actually **berries**?

\* In October 1999 an **iceberg** the size of London broke free from the Antarctic ice shelf.

\* The tallest tree ever was an **Australian eucalyptus** - in 1872 it was measured at 132.5 metres.

# How long can you survive on which planet without a spacesuit?



**Rona Sakko, President - Junior Field Naturalists SA**

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*Patron: Prof Chris Daniels*