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Scavenger hunt challenge: Page 2

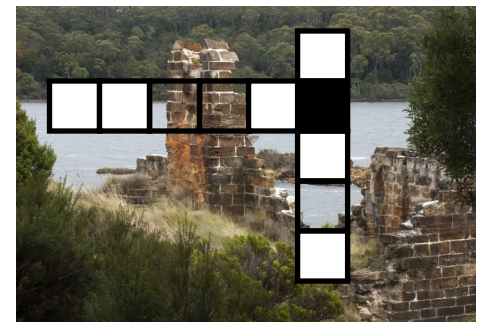


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How well do you know your islands? Page 2



# VOLCANANISM IS ALL AROUND US

A VOLCANO is formed when hot molten rock, gas and ashes escape from an opening in the Earth's surface.

This liquid or semi-liquid rock is known as magma, and when it reaches the Earth's surface we call it lava.

Volcanoes are often found at the meeting point of tectonic plates, pieces of the Earth's surface that fit together like a jigsaw puzzle.

Volcanoes are many shapes and sizes, and can be found on the ocean floor and under ice caps too.

Two well-known landscapes on Tasmania's North-West Coast, The Nut and Table Cape, are ancient volcanic plugs.

Blinking Billy Point in Sandy Bay is also the remains of an ancient volcano, and was first discovered by Charles Darwin during a visit to Hobart Town in 1836.

Some people believe that kunanyi/ Mount Wellington is a volcano.

**Continued Page 2**



You may have heard of famous volcanoes like Mount Etna in Italy, main picture.

But The Nut, far left, and Table Cape, left, on Tasmania's North-West Coast, are also the result of volcanic activity a long time ago.

The rich, red soils on the North-West Coast are largely the remains of weathered lava flows.

While the new highway between the Bridgewater Bridge and Bagdad cuts through the Brighton Basalts, lavas that flowed through the valley and river beds 20-40 million years ago.

If you travel between Kingston and Hobart on the Southern Outlet you can see dolerite rock - formed by the upwards movement of magma - wedged between sandstone and mudstone in the road cuttings.

Images: iStock.com/ SalvoV/ slovegrove/ czardases

## Little known islands home to Australia's active volcanoes



EXCITED: Dr Jodi Fox with Big Ben in the background.

YOU may have heard or read that there are no active volcanoes in Australia.

Well this is not entirely true.

More than 5000km from Hobart, in one of the remotest parts of the world, lies Heard Island and the McDonald Islands group.

They are Australian territory, administered by the Australian Antarctic Division.

Heard Island is home to Big Ben, an active volcano which is officially

2745m tall, 517m taller than Mount Kosciuszko, and it would be a lot taller if its lava was not cooled by glacial ice.

Dr Jodi Fox, an Antarctic Volcanologist from the Institute for Marine and Antarctic Studies, University of Tasmania, visited the area with 39 other scientists in 2016, on board the CSIRO research vessel *Investigator*.

"It was one of the most exciting experiences of my life," Dr Fox said.

"There were people who study oceanography, biology, ocean chemistry, sea floor mapping and geology on board.

"Most importantly I got to see the volcano I had been studying for three years erupting."

While Heard Island is larger, the volcanic activity of the McDonald Islands group is more dramatic, with thicker lava that traps gas inside, and explodes when it nears the surface.

**Continued Page 2**

# A good time to do some scavenging

SCAVENGER hunts are a fun activity, that can be played anywhere.

All you need is a list of items to find and perhaps a time limit.

**Your challenge** is to design a scavenger hunt in your own backyard for someone in your family.

Make a list of items - plants, pots, garden tools, rocks, toys, balls, anything that can be found around your yard - and tick boxes on a page.



A clipboard is a good idea.

You can make the hunt as easy or as difficult as you like, but don't make it so

hard that participants will lose interest, particularly if it is likely to be a younger sibling.

You could leave markers around the yard to assist participants to find the items - perhaps a string line or a balloon in a tree.

If you have access to technology you could take photos of the items, and place them on a printed page. If not you could provide drawings of the items included in the hunt.

If you wanted to, you could add another element, and make your game a night time scavenger hunt using torch light.



Professor Finn loves a scavenger hunt, particularly if it involves learning fun. The Professor suggests you design an online scavenger hunt by coming up with a list of trivia questions. Participants need to find the answers to the questions within a set time limit.

Share projects inspired by *The Wonder Weekly* with us.  
Email: [UnderwoodCentre.Enquiries@utas.edu.au](mailto:UnderwoodCentre.Enquiries@utas.edu.au)

Image: iStock.com/ DEBOVE SOPHIE

## Volcanism in landscapes, soil and rock

**From Page 1**

This is a myth, but Mt Wellington is made of magma.

**Your challenge** is to create an outdoor baking soda volcano.

But ask an adult family member for permission first.

All you need is:

- 2 tablespoons of baking soda.
- 6 drops of dishwashing detergent.
- Food colouring.
- Vinegar.
- A plastic bottle.
- Warm water.
- A mound of dirt or gravel.

Fill most of the bottle with the warm water and a few drops of food colouring.

Add the detergent and the baking soda.

Shape the mound of dirt or gravel into a volcano shape around the bottle.

Slowly pour in some vinegar and prepare for the eruption.

This is caused by a chemical reaction, which produces a build up of gas.

Perhaps you can try and find out which gas is produced by the chemicals used in this experiment.

Children's University Tasmania members can earn stamps in their passports for this volcano challenge, at the discretion of their school coordinators.

## Volcanic islands an animal haven

**From Page 1**

A large eruption in the late 1990s saw the land mass double in size.

The islands are located on top of a plateau and the area is very attractive to whales, seals, penguins, and sea birds, including some that live nowhere else in the world.

The 2016 voyage investigated whether small volcanoes on the

sea floor or gasses were bringing nutrients from deep in the earth to supply the food chain.

Dr Fox had a different job until her late 20s.

"To become a volcanologist I did a science degree with a geology major, and then a PhD in volcanology."

**Can you find Heard Island and the McDonald Islands on a map of the world?**

## Tune in to our interactive live show

The Peter Underwood Centre has a new, weekly broadcast, *UCTV Alive for Kids*.

To find out more head to our Facebook page:  
[www.facebook.com/UnderwoodCentre/](http://www.facebook.com/UnderwoodCentre/)



## Crossword No.6 solution (check your answers)

- |               |             |              |
|---------------|-------------|--------------|
| <b>Across</b> | 11. London  | 2. Cambridge |
| 4. Aviator    | 12. Glider  | 3. Wright    |
| 5. Jumbo      |             | 6. Concorde  |
| 7. Drone      | <b>Down</b> | 9. Qantas    |
| 10. Seaplane  | 1. Pilot    | 10. Strahan  |

## Crossword No.7 - Islands

**Across**

- Island native
- A small island
- Island country in Indian Ocean (title of animated movie)
- Tasmanian island named after explorer Matthew ...
- Honshu is the largest island of this country

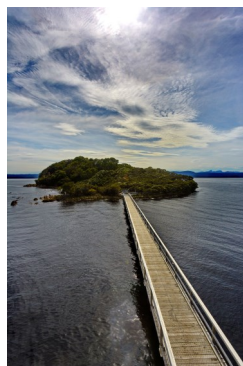
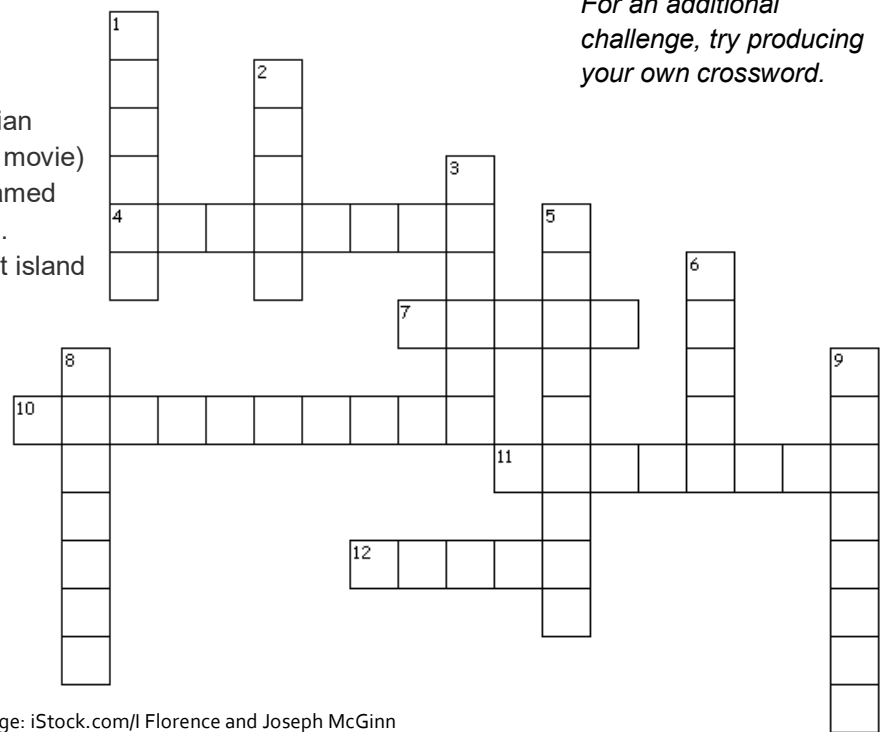


Image: iStock.com/I Florence and Joseph McGinn

**Down**

- USA island state
- Former convict settlement on Tasmania's West Coast - ... Island
- The world's largest sand island - ... Island
- The world's largest island
- You will find the volcano Big Ben here - ... Island
- Tahiti is found in this ocean
- Australian island state

*For an additional challenge, try producing your own crossword.*



Solution next week.