

Year 7

Reading Magazine  
2016



**NAPLAN** NATIONAL ASSESSMENT PROGRAM  
Literacy and Numeracy

**acara** AUSTRALIAN CURRICULUM,  
ASSESSMENT AND  
REPORTING AUTHORITY

# Penguins from outer space

Adélie penguins can now be spotted from space. Well, not the penguins themselves but a bright pink trail they leave behind.

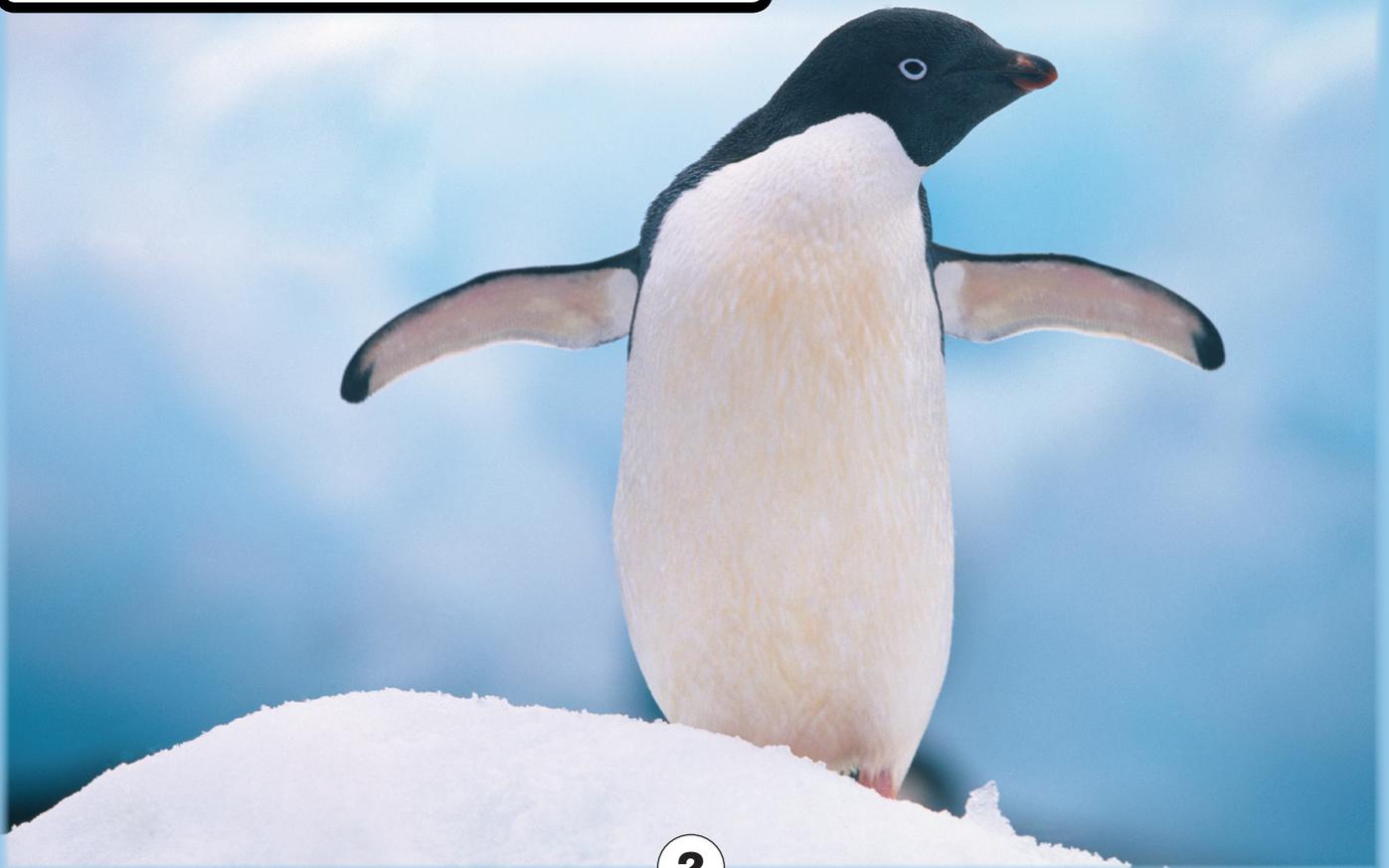
The pink 'blanket' is made by the birds' guano (a scientific word for the penguins' waste). Researchers can track the penguins in Antarctica by photographs taken from space.

Adélie penguins are birds of habit. This means they return to the same rocks each year to breed. As a result, the guano builds up where the colony builds nests on the rocks. The guano is very bright so it can be seen for a long time after the penguins have left.

What causes this strange thing to happen? You guessed it: the penguins' diet. Adélies feed mainly on tiny sea creatures such as krill, as well as on fish and squid. The colours of the krill mix with the penguins' digestive juices to make this bright colour. If the penguins lived only on fish, their guano would be white. However, there are usually lots of brightly coloured krill for the penguins to feast on, so their guano is pink.



*A computer-enhanced image of Adélie penguin colonies*



# Please do not feed native animals

**The native animals in this park have enough natural food to survive and thrive.**

You might think that you are being kind to the native birds and animals by giving them your food scraps, but feeding them or leaving rubbish around that they might eat is cruel, not kind!



## **Remember:**

- Feeding animals can make them sick because sometimes our food contains ingredients that native animals cannot easily digest. They can become weak and more likely to catch a disease.
- The animals become used to being fed by people or finding food in rubbish. When this happens they can lose the ability to hunt and forage for themselves when they need to.
- Animals that rely on being fed by humans may become aggressive. They gather near areas of high human activity such as campsites and walking tracks. Animals have been known to fight over food and bother people in the area.
- Feeding animals can encourage them to look for food in residential areas or nearby farms. This is dangerous for both the animals and residents.

**Please be a friend to our native birds and animals.**

**Take your food scraps and rubbish with you.**

Feeding animals is an offence under By-law 457 and may attract a \$250 fine.

# Antarctica

A blog for those who work and live in Antarctica and for those who are just plain interested.

## *Quad bikes in Antarctica* *Posted on Sunday, January 12* *by David Barringhaus*

I haven't mentioned these machines in my blog before but they form a big part of the equipment at the Davis and Casey Stations in Antarctica. Quads, sometimes called quikes, are four-wheeled motorbikes and they are often the best choice for transport away from the permanent research stations (off-station).

We use the quads for search and rescue as well as science-based expeditions out onto the sea ice. On every trip they need to carry ice-drilling tools, emergency equipment, a GPS and personal provisions.

To use quads in Antarctica, you need to attend a two-day course before you arrive. You then have to complete a survival course once you are in Antarctica. This course covers everything from how to prepare for an off-station expedition to refuelling in the field and the use of emergency equipment.

The quads handle almost everything but, like all machines, they have their limitations. With very low tyre pressure they can handle mushy snow but in really soft powdery snow they can become bogged. They need to have micro spikes embedded in the tyres to be used on sea ice. The harder glacier ice, or blue ice, up on the flat hills can be dangerous as the quads tend to slide around sideways. Because the ice is rock-hard the spikes cannot dig into the surface.

Next week I will fill you in on my most recent visit to the penguin colony at Windy Bay.



Quad with trailer at Casey Station



Quads at Casey Station



Quads out in the field

*Buck, a sled dog that has been treated badly by humans in the past, is drawn to life in the wild. One night he hears the call of a timber wolf and goes to investigate.*

# The stranger

As he drew closer to the cry he went more slowly, with caution in every movement, till he came to an open place among the trees, and looking out saw, erect on haunches, with nose pointed to the sky, a long, lean, timber wolf.

He had made no noise, yet it ceased from its howling and tried to sense his presence. Buck stalked into the open, half crouching, body gathered compactly together, tail straight and stiff, feet falling with unwonted care<sup>1</sup>. Every movement advertised both a threat and an overture of friendliness. It was the menacing truce that marks the meeting of wild beasts that prey. But the wolf fled at the sight of him. He followed, with wild leaping, in a frenzy to overtake. He ran him into a blind channel, in the bed of the creek where a timber jam barred the way.

Buck did not attack, but circled him about and hedged him in with friendly advances. The wolf was suspicious and afraid; for Buck made three of him in weight, while his head barely reached Buck's shoulder. Watching his chance, he darted away, and the chase was resumed. Time and again he was cornered, and the thing repeated, though he was in poor condition, or Buck could not so easily have overtaken him. He would run till Buck's head was even with his flank, when he would whirl around at bay, only to dash away again at the first opportunity.

But in the end Buck's persistence was rewarded; for the wolf, finding that no harm was intended, finally sniffed noses with him. Then they became friendly, and played about in the nervous, half-coy way with which fierce beasts belie their fierceness. After some time of this the wolf started off at an easy lope in a manner that plainly showed he was going somewhere. He made it clear to Buck that he was to come, and they ran side by side through the sombre twilight, straight up the creek bed, into the gorge from which it issued, and across the bleak divide where it took its rise.

<sup>1</sup> feet falling with unusual care



# Looking back



Even before I opened my eyes I could tell that things had not gone completely to plan. My whole body seemed to hum with pain but in a distant, subdued way that made me feel cushioned, as though I was floating above it. Not altogether unpleasant actually. I was clearly breathing and could feel my legs, so that was good. Mum always says you should look for the positives. I felt weirdly calm just lying there and it never dawned on me to try and get up. That was probably a good thing of course, because I might have caused even more damage.

I would have landed flat on my back if it hadn't been for my backpack. As it was I lay slumped, legs splayed out before me, supported by my trusty just-in-case raincoat and my packed lunch. Just as I became aware of how unnaturally silent everything was, the silence faded and was replaced with fuzzy white noise as if a foggy layer of cotton wool filled my head. Real noises gradually crept in, cockatoos screeching and the steady electric hum of the cicadas. Then one noise broke away from the others, clarifying as it seemed to get louder and louder and more and more insistent with every repetition. Eventually, as though it had broken through some gauzy bubble into my brain, the sound morphed itself into my name and I marvelled at the fact that I hadn't recognised it before.

Nick sounded so stressed out. His voice seemed a long way up and squinting as I was, into the sun, I couldn't make him out. There were shades of green as far as the eye could see, broken here and there by solid slabs of grey rock. Gnarled gum trees reached out from the rock face as though they were hanging on by sheer force of will. Without doubt an incredibly challenging climb. My eyes scaled all the way to the top. How was I going to get out?

I concentrated hard on Nick's voice in an attempt to remain calm.

He was saying the same thing over and over — 'Help is on its way Ollie, everything will be ok!'

I concentrated hard on believing him but, to tell the truth, it wasn't until I heard the unmistakable sound of a helicopter drawing near that I really did.

# Electric car world record smashed

A team of students from the University of New South Wales (UNSW) has broken a 26-year-old world speed record, establishing their car as the fastest electric vehicle over a distance of 500 kilometres on a single battery charge. The Fédération Internationale de l'Automobile (FIA), world motorsport's governing body, updated its official record with the new mark of 106.966 kilometres per hour set on 23 July 2014.

The world record was broken by the team on a 4.2-kilometre circular track at the Australian Automotive Research Centre, located about 50 kilometres from Geelong, Victoria.

'This record was about establishing a whole new level of single-charge travel for high-speed electric vehicles, which we hope will revolutionise the electric car industry,' said jubilant project director and third-year engineering student Hayden Smith.

The students are from UNSW's Sunswift, Australia's top solar car racing team. Their current vehicle, 'eVe', is the fifth to be built and raced since the team was founded in 1996. The team has previously set a world record for the fastest solar-powered road trip from Perth to Sydney, and a Guinness World Record for the fastest solar car.

The current car uses solar panels on the roof and hood to charge a 60-kilogram battery. However, the panels were switched off during this world-record attempt, leaving the car to run solely on the battery charge.

The team hopes the car's performance proves it is ready for day-to-day practical use.

'Five hundred kilometres is pretty much as far as a normal person would want to drive in a single day,' Smith said. 'It's another demonstration that one day you could be driving our car.'

No secret has been made of Sunswift's long-term goals for the car. With the world record now official, the team has embarked on its next major challenge—modifying 'eVe' to meet Australian road registration requirements.



*Sunswift in action*



*At the race track*

# One man's trash ...

The philosophy known as Freeganism comes from a very challenging idea for a consumer-oriented society. That idea is: we already have enough.

Economists can often be heard to fret on TV that 'the economy grew at a slower than expected rate last year'. But why are we so fixated on growth? The economy grows when we manufacture and sell more things. In a society already rich in 'things', how can we possibly justify making and buying more and more? According to the Freegans, our society's horrifyingly simple answer to that question is to *waste* what we already have by discarding it.

That growth and waste go hand in hand should not be controversial to anyone familiar with marketing. Last year's hottest mobile phone looks old and outdated compared to this year's model, doesn't it? And who would wear baggy jeans anymore when skinny jeans are so clearly in? This marketing phenomenon is called 'perceived obsolescence'. It relies on the idea that what is old feels inadequate or unusable, in order to encourage people to purchase replacements for perfectly good things that they already have.

As a remedy, Freegan communities consciously practise habits of non-consumption. Freegan behaviour can range from simply sharing tools, clothes or equipment between neighbours and friends, to the radical practice of 'dumpster diving'. This refers to seeking out waste food discarded by grocers and supermarkets because of cosmetic imperfections like a dented tin or a spot on the skin of an otherwise good apple.

Although making their next meal from 'rescued' food may not suit everyone, the essence of the Freegan message—to waste less, and to want less—is one worth holding on to.



# Antonio's mystery

Antonio leaned over the long rough table and selected the brush he thought was the correct one. The Master stood glowering over him in the shadowy studio in the basement of the Palazzo Cascata. Outside the sun was shining, but little of its natural light penetrated the windows set high into the thick stone walls.

He picked up the brush hesitantly, his eyes furtively glancing sideways to see if Lorenzo's expression gave any hint of whether his selection had been correct. Lorenzo's face had set itself into a scowl but as he made no comment, Antonio held out the brush for approval. Lorenzo grunted, as close as the Master would come to praise in his workshop.

Antonio was a humble apprentice in the workshop, working for the Duke in whose palace he now lived. He was privileged to be under the tutelage of the Master whose job it was to mould Antonio into a competent, maybe even great, artist. He had left home only a year ago, just before his twelfth birthday, and he missed his parents and younger brothers and especially his sister. Home had been the tailor's shop in the city where his father fashioned beautiful clothes for the richest nobles in the land while he, Antonio, drew the creations that his father would sew. Antonio had always thought he would follow in his father's footsteps, but word had reached the ears of the Duke that the boy showed great talent with a pen and with colours, and so here he was at the palace.

For a year he had applied himself to his allotted tasks: he swept the floors, ran errands, prepared the wooden boards and panels for painting, and ground and mixed the pigments. It was hard work, tedious work, relieved a little by formal lessons in drawing, copying his Master's works, and occasionally sketching the statues in the gardens and porticoes of the Duke's estate.

Antonio had known that soon he would progress to assisting the Master on his paintings and now here he was choosing brushes and pigments, ready to paint. His task was a small portion of the landscape setting in the Master's latest portrait of the Duke's daughter, a young girl his own age whom he had occasionally glimpsed sitting stiffly and unsmiling in the studio.

Lorenzo seemed satisfied enough with the choice and left the studio abruptly, leaving Antonio to load the brush with pigment and complete his task. Antonio turned to the large wooden panel with the partly formed image of the young girl. Just as he was about to start his section of the background, he spied some marks. He peered closely. *Aiutami*—Help me—it read, followed by some letters. Antonio pondered their meaning and, with alarm gradually seeping into him, realised that the letters were the initials of the Duke's only daughter, Isabella Alessandra.



**END OF READING MAGAZINE**

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## ACKNOWLEDGEMENTS

### Cover

Adélie penguin with wings outstretched image © Corbis

### Penguins from outer space

Adélie penguin with wings outstretched image © Corbis

Map courtesy of the Australian Antarctic Data Centre. Satellite image © DigitalGlobe 2015.

### Antarctica

Text and three images © David Barringhaus Antarctic Horse

### The stranger

European wolf image © Kiri Stuart-Clarke 2015. [www.kiristuartclarke.photography](http://www.kiristuartclarke.photography)

Extract from *The Call of the Wild* by Jack London (1876–1916), first published in 1903.

### Electric car world record smashed

Text and photos source: UNSW Newsroom

Photos: Daniel Chen/Sunswift (Image modified - name removed from helmet).

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