

A close-up photograph of a watermelon slice, showing the green rind and the red flesh with black seeds. The image is used as a background for the magazine cover.

Reading Magazine 2010

Year 9

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Titanic

The supposedly unsinkable steamship *Titanic* sank without trace on its first voyage in 1912 after hitting an iceberg. It was not until 1985 that the wreck of this famous ship was found. A French–American team, led by Dr Robert Ballard, used remote-controlled submersible vehicles to locate the wreck where it lay 3.5 kilometres below the surface. Dr Ballard and his team made the first manned dive to the *Titanic* in 1986. They took thousands of photos of the ship and the artefacts on the seafloor around it. They also left a sign asking people to leave the site undisturbed.

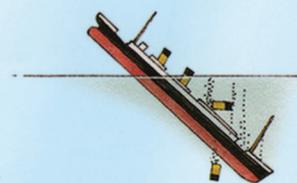
However, a year later, another team went to the site and brought back hundreds of artefacts. These included plates, jewellery, coins and even parts of the ship itself. This recovery team has now collected about 6 000 objects altogether from the *Titanic* and displays them in museums and travelling exhibitions. This team (now a company known as RMS Titanic Inc.) believes that people will remember the tragedy and learn about the period if they can actually see these artefacts, instead of everything being left to decay deep in the ocean.

Dr Ballard believes strongly that nothing should be taken from the site, and that it should remain as a dignified memorial to those who died on that cold night in April 1912. The Titanic Historical Society agrees, and its museum only displays artefacts that were not on the ship when it sank or that were saved by survivors. These include shipbuilding plans, lifejackets and small things carried in handbags, as well as letters and postcards written by passengers.

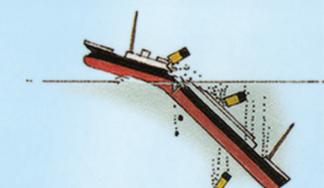
How the Ship Broke in Two



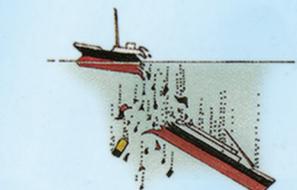
1. The supposedly watertight compartments flooded, and the bow began to sink.



2. The weight of the water pulled the bow under water and the stern out of the water.



3. The ship broke apart under the strain of the weight.



4. The bow plunged to the bottom, nose first. Then the stern sank.

Jacob

‘All right,’ Ben said. ‘Where are we going?’

Jacob was leaning against the white fence around the garden. He lifted his stick. ‘That way,’ he said, pointing across the paddock to the trees on the other side.

‘How do you know?’ asked Ben, curious. ‘I mean, how do you know where you are?’

Jacob paused. ‘I suppose I don’t think about it mostly. Like you. I know the house is there, behind me, because I just came out of it. I know we’re standing on the track because it feels different on my feet, not like grass or the path. I know there are sheep paddocks around because I can smell them, and I know the bush starts over there because I can hear it.’

‘The birds and things?’ asked Mary.

‘Sort of,’ said Jacob. ‘I can hear the trees too. A sort of furry sound. You don’t hear the wind like that on paddocks. The smells are different too, and the way the wind feels on your skin. Things like that.’

Ben glanced at Simon. Simon shrugged. ‘That’s what you mean by seeing?’ Ben asked. If that’s all there was to it they may as well go back inside.

‘Sort of,’ said Jacob.

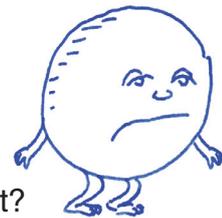
‘But we can see all those with our eyes,’ said Mary. ‘We don’t need to feel them or hear them or smell them.’

‘Maybe I can show you other things,’ said Jacob.

And then there were 8

In 2006, the International Astronomical Union (IAU) voted to change the rules about what constitutes a planet. As a result, Pluto, which was the smallest, coldest and generally most distant planet from the Sun, no longer qualifies. It *does* orbit the Sun, and it *does* have enough gravity to force it into a spherical shape, but – and here’s the problem, the third criterion – it does *not* dominate its neighbourhood. In other words, Pluto still has lots of large objects orbiting around it.

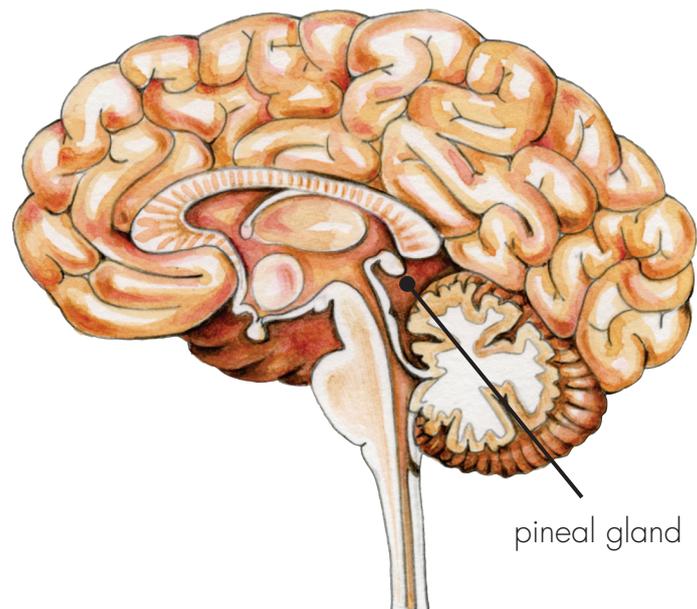
The IAU therefore created a new category – dwarf planet – into which Pluto now fits, along with four other celestial bodies in our solar system.



Astronomy Forum

What do you think about Pluto’s demotion from planet to dwarf planet?

User	Comment
Cookie 4.15 pm	Let’s start with the word ‘demotion’. Pluto is still the same fascinating astronomical object, whether we classify it as a planet or not.
Spacegirl 4.23 pm	Well yes, Cookie, but classifications are very important to science. I know the IAU’s decision was very controversial at the time but, as technology improves, they are likely to change their minds again.
Bookman 4.27 pm	And that will be a complete disaster! All the textbooks will have to be rewritten yet again, especially those for little kids.
The Doc 5.48 pm	It’s far from a disaster. There’s a really valuable lesson in this. Everyone needs to understand that our scientific knowledge is always open to change as we learn more about the world around us.
Cookie 6.02 pm	It’s also misleading to say that Pluto is not a planet, but it is a dwarf planet. That’s like saying a black dog is not a dog!
Spacegirl 6.10 pm	That’s a false analogy. The IAU did define them as separate things. It’s more like comparing fruit and vegetables – they’re all food.
Pearly 9.05 pm	You are arguing about the wrong thing. The real problem is how you define when a dwarf planet has finally cleared the junk out of its neighbourhood, out of its orbit. That’s what the Union didn’t clearly define. It seems to me they left that for others to sort out in the future.



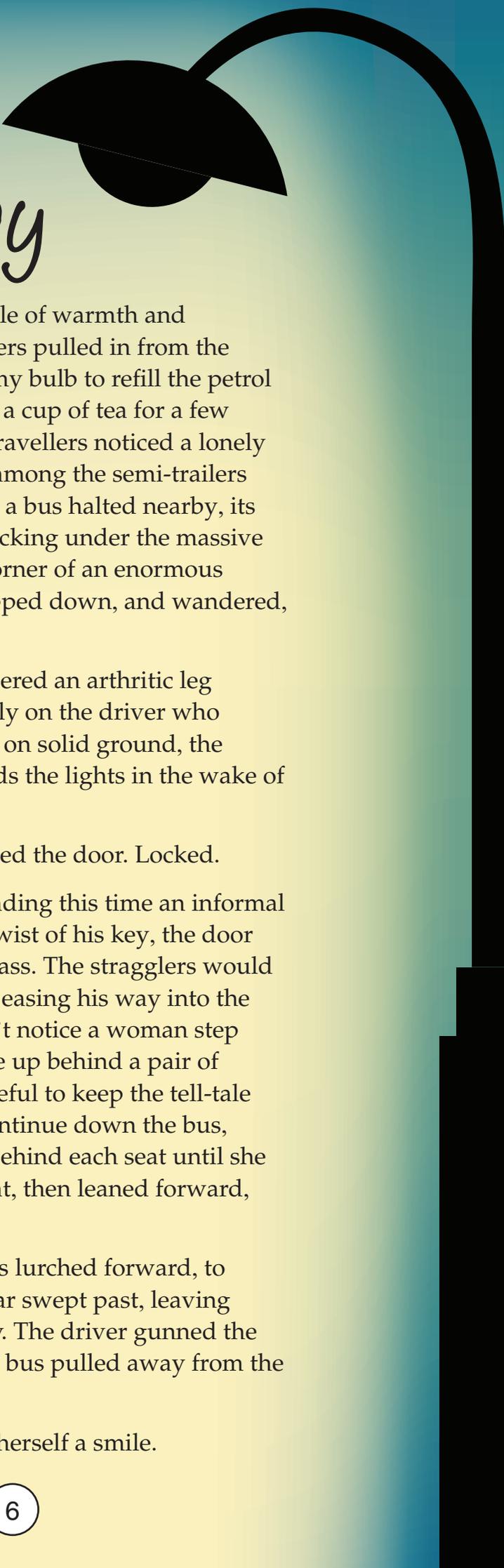
Our body rhythms

Shortly before you wake up in the morning, hormones flow from your glands into your bloodstream to get you ready for your daily activities. As you get ready for school, your heartbeat speeds up, and your breathing becomes more intense.

Throughout the day, your body goes through other changes. By late afternoon your body temperature has gradually increased by about 0.5°C . Your blood pressure, which is lowest during the early morning, fluctuates during the day until it reaches its peak by early evening.

Later at night, after the day's activities, you start to feel tired. While you are sleeping, your body goes through even more changes. Deep within your brain a structure called the pineal gland secretes a chemical called melatonin that flows into your brain to make you feel sleepy. The highest levels of melatonin occur at about 2 a.m., rising to about four to six times greater than during the day. If you woke up during this time of night it would be very difficult to do even simple tasks because the increased levels of melatonin would cloud your concentration and judgment.

Sleep also brings other changes. While your body is at rest, there is a decrease in respiration, heart rate and blood pressure. Your overall metabolic rate – the rate of the chemical reactions that go on in the body – also drops. The secretion of growth hormone, however, increases. About half the total day's amount of growth hormone is released during the first few hours of sleep, and most of the growth and repair of your body tissues occurs during sleep. By morning the cycle starts all over again.



The stowaway

The lights of the service station created a circle of warmth and movement amid the darkness. Weary travellers pulled in from the highway, gathering like moths around a grimy bulb to refill the petrol tank, stretch aching muscles and hunch over a cup of tea for a few minutes in the all-night café. None of these travellers noticed a lonely figure who shunned the bright light to wait among the semi-trailers parked at the edge of the tarmac. Only when a bus halted nearby, its airbrakes hissing, the gravel crushed and cracking under the massive wheels, did the figure stir and creep to the corner of an enormous prime mover to watch as the passengers stepped down, and wandered, yawning, into the café.

An elderly man was the last to leave. He lowered an arthritic leg gingerly from the bottom step, leaning heavily on the driver who waited patiently below. With this man safely on solid ground, the driver closed the door and headed off towards the lights in the wake of his passengers.

The figure stepped from the darkness and tried the door. Locked.

Twenty minutes later the driver returned, leading this time an informal line of passengers at his back. With a quick twist of his key, the door folded open and he stood aside to let them pass. The stragglers would be a few moments yet so he climbed aboard, easing his way into the seat as they came in ones and twos. He didn't notice a woman step from the shadows of a removal van and close up behind a pair of sleepy teenagers. She mounted the steps, careful to keep the tell-tale knapsack concealed as best she could and continue down the bus, nonchalantly checking the webbed pockets behind each seat until she found an empty one. She slipped into the seat, then leaned forward, taking an age to tie and re-tie her shoelaces.

The front door sighed as it closed and the bus lurched forward, to pause briefly at the edge of the highway. A car swept past, leaving the road behind it suddenly black and empty. The driver gunned the engine, commanding its throaty roar and the bus pulled away from the road-house into the sea of darkness.

Only then did the woman sit up and permit herself a smile.

Gorillas under threat



THEY'RE CALLING ON YOU

Recycle your old mobile phone today and help save gorillas in the wild.

Our reliance on mobile phones is driving gorillas to extinction.

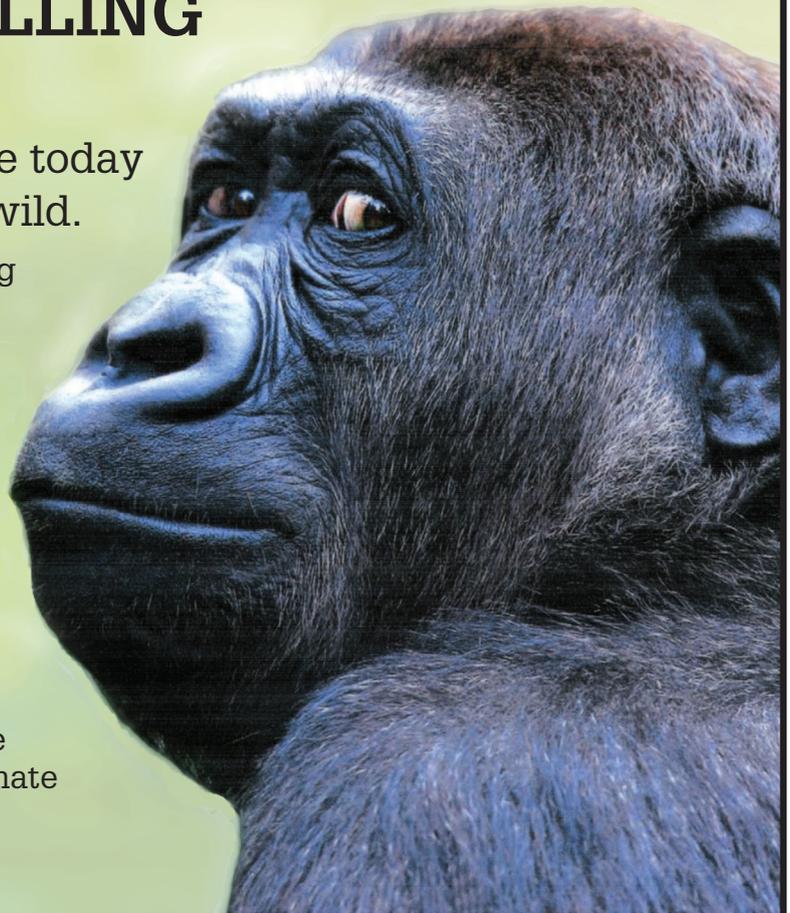
Your phone contains the metal coltan mined from gorilla habitat. Each time you recycle a mobile phone, the need to mine coltan is reduced.

Next time your mobile rings, remember that 'they're calling on you'!

Recycle your old mobile phone today!

Funds raised from recycling your phone will be donated by Zoos Victoria to primate conservation.

www.zoo.org.au/Calling_on_You



the Jane Goodall Institute
WWW.JANEGODALL.ORG



Crisis in the Congo

Gorillas and other wild animals have always been hunted for meat by traditional forest peoples. However, in recent years there has been an unsustainable increase in the number of gorillas being hunted commercially.

Whenever new gold or coltan mines are built, and forests are logged, gorilla habitat is destroyed. This makes it easier for commercial hunters to

access previously inaccessible areas of forest.

The Jane Goodall Institute is a not-for-profit organisation that focuses on wildlife conservation in Africa. The Institute believes that the illegal commercial trade in wild meat is the greatest current threat to gorillas, and is working with local communities, government and businesses in Central Africa to develop solutions to the current crisis.

Coltan facts

- Short for columbite-tantalite
- Highly heat-resistant
- Valuable 'magic dust' component of common electronic products such as computers, DVD players and mobile phones
- Main legitimate mines are in Australia, Canada and Brazil
- 80% of the world's reserves are in the Democratic Republic of the Congo

The photo

It was Johnno. No mistaking the big, lopsided grin, the oversized head with its Cagney-style middle parting and brilliantine waves. But what puzzled me, and had, I suppose, even more than the oddness of his pose, leapt out from the page and caught my eye, was the glasses he was wearing. Round gold-rimmed glasses that might have belonged to his grandmother or been a property from an end-of-term play.

Surely they were wrong! Johnno had never worn glasses. I stared at the photograph for a good three minutes, searching my memory for some image of him, bursting in through the door – breathless, late as usual, his socks round his ankles – or swerving dangerously close as he hurled off on his bike; he was as clear in my mind as if he were there. But the glasses, those odd gold-rimmed specs that sat so firmly on the saddle of his nose in the lifesaving photograph, they simply refused to materialise. Either my memory was at fault or the camera, on that particular afternoon, had lied.

I ran my eye along the row of faces and checked my memory against the names below. Carl Reithmuller, Jim Bostock, Bill Braithwaite, Neil Pickup, Colin Smalls, Tippy Thompson, Mervyn Deeks – I named every last one of them without fail. My memory, like Johnno's eyesight, was perfect. Twenty-twenty every time. I could see myself paired with each one of those figures, as we stood opposite one another ready to begin, hands on shoulders, heads up. With each of them, that is, except Johnno. And it occurred to me suddenly that he had never been a lifesaver at all. So how had he got into the picture? What was he doing there? I counted. And sure enough, the number was uneven. Johnno made thirteen.

So the camera *had* lied. Or Johnno had. Those glasses, if one could check them, would turn out, I was certain now, to have nothing in the frames. They were a disguise, a deliberate bending of the facts. A trick set up as carefully that afternoon as Mr Peck's camera, to preserve something other than the truth, and to make someone like me, nearly twenty years later, stop and look again. A joke with a time fuse.

How like him!



Being a science writer

WRITING ANYTHING that's any good is hard work, but science writers labour under a particular, and rather peculiar, set of constraints. Science is new – only about 400 years old, as a going concern – and prodigious, having transformed our conception of the universe and of our place in it. But precisely because its impact has been so rapid and so monumental, science has not yet been absorbed into our common consciousness. Readers come to the printed page already knowing something about crime and punishment, love and loss, triumph and tragedy – but not, necessarily, about the roles played by theory and observation in identifying a virus or tracing the curvature of intergalactic space. Hence science writers have to keep explaining things, from the significance of scientific facts to the methods by which they are adduced, while simultaneously holding the readers' attention and moving the story along. It's as if business reporters had to constantly explain what is meant by "turning a profit", or sportswriters by "scoring a touchdown".

Unsurprisingly, we science writers are often misunderstood. People tend to assume that we write computer software manuals or those buckram-bound engineering textbooks assigned to students in technical studies. Fellow authors dismiss us as translators. Editors may think us narrow. A quarter-century ago, when I was struggling to move away from writing about politics and rock music in order to concentrate on astronomy, the editor of a major magazine pressed me to do an article, called "The Bionic Man", on artificial body parts. When I declined, he became impatient.

"Well, what do you want to write about?" he asked, throwing up his hands, like a motorist cut off in traffic.

"Astronomy," I replied.

"You've already written about astronomy!"

"Yes, but I like it. It was my original interest in life."

"Aren't you afraid of becoming some sort of Johnny One Note?"

"Well, not really. You know, what's out there is something like ninety-nine, then a decimal point, then twenty-eight more nines per cent of everything. Covering nearly everything doesn't seem all that limiting. And it leads to lots of other things."

I've been on the wrong side of arguments with editors more often than it is comfortable to recall, but on this occasion I turned out to have been right. Astronomy did lead to everything else. It led me into other sciences of course – among them physics, chemistry, and biology – and also, by many winding paths, to poetry, literature, history, philosophy, art, music, and into conversation with some of the smartest and most creative people in the world.



END OF READING MAGAZINE

ACKNOWLEDGEMENTS

Titanic

Text and diagram adapted from *Underwater Treasures* by Maureen Haselhurst, Pearson Education Australia, 2004.

Jacob

Extract adapted from *Rain Stones* by Jackie French, HarperCollins Australia, 1991.

Our body rhythms

Extract adapted from *Clocks and Rhythms* by Alvin Silverstein, Twenty-First Century Books, 1999.
Image by Chantal Stewart.

The stowaway

Extract from *A Bridge to Wiseman's Cove* by James Moloney, University of Queensland Press, 2007.

Gorillas under threat

Adapted from Poster © Zoos Victoria, 2009.

The photo

Extract from *Johnno* by David Malouf, University of Queensland Press, 1975.

Being a science writer

Extract adapted from *The Best American Science Writing* © Timothy Ferris, 2001.

Surf lifesavers

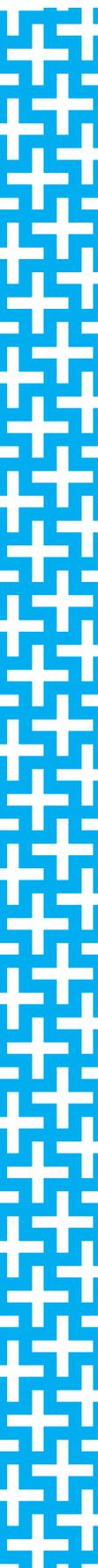
Photograph by Sarah Rhodes, newspix.com.au



Surf lifesavers

Australia was the first country in the world to have surf lifesavers. In the early 1900s, surf lifesavers were all males. Today, the mix of people who patrol our beaches reflects Australian society. We can be proud that the lifesavers of today are both males and females and come from many cultural backgrounds.

READING



0:65

Time available for students to
complete test: 65 minutes

Use 2B or HB
pencil **only**



Do not write on this page.

Read *Titanic* on page 2 of the magazine and answer questions 1 to 6.

1 The purpose of the first paragraph is to

- introduce the discovery of the wreck of the *Titanic*.
- describe the artefacts found on the ship.
- list the members of Dr Ballard's team.
- explain why the *Titanic* sank.

Shade one bubble.



2 Compare the beliefs of Dr Ballard's team with the beliefs of the team from RMS Titanic Inc.

The members of RMS Titanic Inc.

- think it unnecessary to remember the tragedy.
- have a different idea of how to remember the tragedy.
- share Dr Ballard's view of how to remember the tragedy.
- have a different idea of why the tragedy should be remembered.

3 What is the relationship between the diagram and the main text?

- The diagram adds background information to the main text.
- The diagram explains key words from the main text.
- The diagram challenges the ideas of the main text.
- The diagram gives a summary of the main text.

4 ... *those who died on that cold night in April 1912.* (Paragraph 3)

What is the main effect of these words?

- to make the text suspenseful
- to appeal to the readers' emotions
- to remind the readers of the details
- to impress the readers with detailed knowledge

5 What is one thing the Titanic Historical Society refuses to do?

- display *Titanic* artefacts publicly
- collect artefacts saved by survivors
- consider the wreck site as a memorial
- dive to the wreck site to get *Titanic* artefacts

Shade one bubble.



6 The focus of the main text is to discuss

- where to see the best *Titanic* artefacts.
- why people are interested in the *Titanic*.
- who first discovered the wreck of the *Titanic*.
- beliefs about displaying artefacts from the *Titanic*.

Read *Jacob* on page 3 of the magazine and answer questions 7 to 12.

7 How does Jacob know where the track is?

- He sees it.
- He feels it.
- He hears it.
- He smells it.

8 What is the main difference between Jacob and the others?

- the way they see
- the way they talk
- the way they hear
- the way they walk

Shade one bubble.



9 *Jacob paused. 'I suppose I don't think about it mostly.'*

After Jacob says this he continues by

- telling a story.
- providing a warning.
- giving an explanation.
- presenting an argument.

10 What is Jacob most likely to have said before they went outside?

- 'Can you show me around outside?'
- 'Will you tell me what you can see?'
- 'Let's play who can spot things first!'
- 'Come on, I'll show you what I mean by seeing.'

11 *'But we can see all those things with our eyes,' ...*

Why does Mary say this?

- to show Jacob's ideas were wrong
- to give an answer to Jacob's question
- to give another example of Jacob's ideas
- to show Jacob that she did not understand him

12 Which of these best describes Jacob in this text?

- He avoids new situations.
- He wishes he was like other people.
- He finds other ways to deal with his situation.
- He is good at getting other people to do what he wants.

YEAR 9 READING

Read *And then there were 8* on page 4 of the magazine and answer questions 13 to 19.

13 Why did the IAU say that Pluto is no longer a planet?

- They discovered that Pluto was shrinking.
- They decided that there were too many planets.
- They redefined the meaning of the word 'planet'.
- They realised they had classified Pluto incorrectly.

Shade one bubble.



14 What point does Cookie first make about Pluto's new classification?

- It does not change Pluto itself.
- It does not represent Pluto properly.
- It influences people's opinion of Pluto.
- It is disappointing for Pluto to be demoted.

15 What does The Doc think of the new classification?

- It teaches a lesson to science critics.
- It makes more people interested in science.
- It explains how to deal with scientific disasters.
- It demonstrates the changeable nature of science.

16 Who mentions an immediate impact of the new classification?

- Cookie
- Spacegirl
- Bookman
- The Doc

Shade one bubble.



17 *It's more like comparing fruit and vegetables – they're all food.*

Why does Spacegirl say this?

- to build on Cookie's ideas
- to challenge Cookie's argument
- to dispute the IAU's classification
- to change the topic of the discussion

18 Why does Pearly consider the IAU's third criterion as problematic?

- It is not flexible enough.
- It has been changed too often.
- It leaves room for interpretation.
- It needs to be tested scientifically.

19 Which of the following best describes the tone of the heading?

- admiring
- playful
- critical
- ironic

Read *Our body rhythms* on page 5 of the magazine and answer questions 20 to 25.

20 When is your blood pressure generally highest?

- early morning
- early evening
- late evening
- around 2 a.m.

Shade one bubble.



21 A person wakes at 2 a.m.

Which of the following tasks does the text suggest it would be most difficult for this person to do?

- open their eyes
- get back to sleep
- write down a message
- wake up in the morning

22 Which of the following facts about melatonin is referred to in the text?

- Melatonin production decreases as people age.
- Light severely reduces the production of melatonin.
- The pineal gland is the centre for the production of melatonin.
- As our eyes register the arrival of darkness, melatonin is produced.

23 Who is the intended audience of this text?

- scientists
- students
- teachers
- doctors

24 The writer assumes readers will have some prior knowledge about their bodies.

What do readers need to know?

- what hormones are
- where the pineal gland is
- what the parts of the brain do
- the different chemicals in the brain

25 What is the main idea in this text?

- how the pineal gland works
- how your sleep cycle changes
- how your body changes over 24 hours
- how hormone levels in your body change as you grow

Shade one bubble.



Read *The stowaway* on page 6 of the magazine and answer questions 26 to 32.

26 What is the figure doing as the elderly man leaves the bus?

- drinking a cup of tea
- watching and waiting
- talking to the passengers
- checking the prime-mover

27 ... a bus halted nearby, its air brakes hissing, the gravel crushed and cracking under the massive wheels, ... (Paragraph 1)

What is one effect of this description?

- It hints that the driver is dangerous.
- It suggests the weariness of the travellers in the bus.
- It supports the image of moths around a grimy bulb.
- It emphasises how vulnerable the figure in the shadows is.

28 *The figure stepped from the darkness and tried the door. Locked.*

What is the main effect of the single-word sentence?

Write your answer on the lines.



Shade one bubble.



- 29** Why is the knapsack referred to as *tell-tale*?
- It shows the woman has very little luggage.
 - The knapsack is too large for carry-on luggage.
 - The knapsack has the woman's name on the outside.
 - It shows the woman has not previously been on the bus.

- 30** What is one reason the woman took a long time to tie her shoelaces?
- It was very dark.
 - Her laces were tangled.
 - She was avoiding eye contact.
 - She was hiding from the figure.

- 31** Which word best describes how the woman behaves?
- recklessly
 - nervously
 - impatiently
 - strategically

- 32** At the end of the text, the woman permits herself to smile. She is pleased because
- she has boarded the bus.
 - she has the best seat on the bus.
 - the bus driver will look after her.
 - she has escaped from the figure in the darkness.

YEAR 9 READING

Read *Gorillas under threat* on page 7 of the magazine and answer questions 33 to 36.

33 *They're calling on you* most directly appeals to the readers' feelings of

Shade one bubble.



- guilt.
- horror.
- despair.
- insecurity.

34 According to the texts, recycling mobile phones helps

- support businesses in Africa.
- protect scarce coltan reserves.
- prevent the destruction of forests.
- stop chemicals seeping into the earth.

35 How does *Crisis in the Congo* differ from *They're calling on you*?

Crisis in the Congo

- focuses more on conservation.
- highlights ways that you can help.
- details precise solutions to a problem.
- explains the broader background issues.

36 *Crisis in the Congo* suggests a conflict of values between

- commercial hunters and coltan miners.
- the Jane Goodall Institute and the government.
- commercial hunters and traditional forest peoples.
- the Jane Goodall Institute and the local communities.

Read *The photo* on page 8 of the magazine and answer questions 37 to 41.

37 What is the main purpose of the first paragraph?

- It suggests the difficulties Johnno will face.
- It establishes the narrator's familiarity with Johnno.
- It highlights the significance of Johnno's grin and hairstyle.
- It identifies the differences between the narrator and Johnno.

Shade one bubble.



38 What does the narrator mean when he says the glasses *simply refused to materialise*?

- He couldn't find them.
- He couldn't recall them.
- He couldn't see properly without them.
- He couldn't see them in the photograph.

39 When the narrator is looking at the photo he is mainly feeling

- comforted by its depiction of happier times.
- startled by its power to evoke vivid memories.
- bewildered by the way it conflicts with his memories.
- amused by the manner in which his friend has changed.

40 What is the narrator mainly doing in the third paragraph?

- questioning his emotions
- examining evidence
- making up excuses
- distorting the facts

41 What function do the glasses have in this text?

- They represent the complication.
- They introduce a comic element.
- They resolve the main conflict.
- They symbolise friendship.

Shade one bubble.



Read *Being a science writer* on page 9 of the magazine and answer questions 42 to 47.

42 *Science is new – only about 400 years old, as a going concern – and prodigious, having transformed our conception of the universe and of our place in it.*

Which of the following quotes contradicts this statement?

- Astronomy did lead to everything else.*
- ... science writers are often misunderstood.*
- ... on this occasion I turned out to have been right.*
- ... science has not yet been absorbed into our common consciousness.*

43 According to the writer, the main difficulty science writers face is

- finding new science topics.
- meeting the reader's expectations of science.
- overcoming the reader's unfamiliarity with science.
- keeping up with the rapid developments in science.

44 Why did the writer refuse to write about *The Bionic Man*?

- He had no expertise in the topic.
- He was not passionate about the topic.
- He did not realise the potential of the topic.
- He did not want to write about the same topic again.

45

Which statement is the most convincing criticism of the writer's argument?

Shade one bubble.



- Mentioning literature and poetry is irrelevant to the argument.
- The writer is obviously a capable science writer, so it can't be that hard.
- The writer introduces concepts that he fails to explain, leaving the reader confused.
- All subjects have specialised knowledge that creates difficulties for those attempting to write about them.

46

Which word best describes the tone of the last paragraph?

- indifference
- satisfaction
- amusement
- frustration

47

What core belief about science is implied by the writer of this text?

Write your answer on the lines.



STOP – END OF TEST

Do not write on this page.

PRACTICE QUESTIONS

Read *Surf lifesavers* on page 12 of the magazine and answer questions P1 and P2.

P1 What is the main topic of this text?

- beaches
- surf lifesavers
- different cultures
- Australian society

Shade one bubble.



P2 The writer supports men and women being surf lifesavers today.

Give evidence from the text that supports this opinion.

Write your answer on the lines.