

Made in **RSA!** 

INCLUDES **Hidden Pictures™**

supernova

The mag for curious kids



p.32

CITIES

OF SA

**FOOD FOR
THOUGHT**

p.38

ALL ABOUT THE FOOD WE EAT!



MAKING SENSE

OF RANDS AND

CENTS

p.14



p.44

INTERVIEW

WITH A

PRO SKATER



DISASTER DOWN UNDER

Vol
9.1



PUZZLES | SCIENCE | NATURE | ACTIVITIES | SPORTS | COMICS



Dear Boredom Busters

For your reading pleasure and with the aim of keeping your minds busy during Covid-19 lockdown, the Supernova team has made the latest issue of *Supernova* magazine available for free.

Please feel free to share this issue with all of your friends.

**Visit www.supernovamagazine.co.za
for more excellent articles and activities.**

**We hope you enjoy the magazine as much as we enjoy creating it.
Don't forget to join our newsletter and subscribe to the printed
magazine**

[SUBSCRIBE](#)

the very best of supernova volume 8

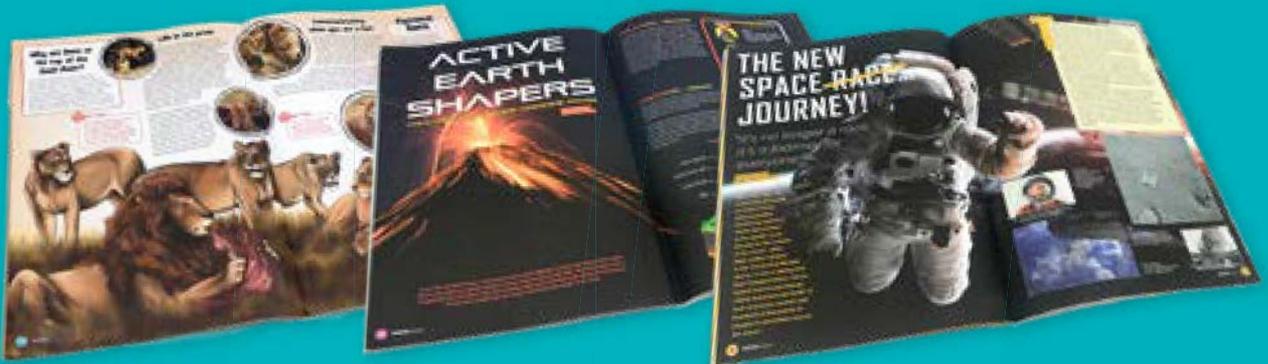
Volume 8 was a treasure chest of fascinating, fun and educational topics! Here's a peek at some of the highlights in the 2019 volume of Supernova magazine.



8.1 In Volume 8.1 we delved into the mystifying mythology of the Greek culture and met some of their weird and colourful characters.

8.2 In Volume 8.2 we put our white lab coats on to study the scientific method and how to construct expert-level experiments.

8.3 In Volume 8.3 we got up close and personal with inspirational painter Frida Kahlo whose paintings tell her fascinating life story.



8.4 In Volume 8.4 we journeyed to the 'pride lands' with Ant to study the royals of Africa's biodiversity... lions!

8.5 In Volume 8.5 we were awe-struck by volcanoes and examined the earth shapers that are still active today.

8.6 In Volume 8.6 our NASA expert writer, Jim Adams, reported on the new space race in celebration of the moon landing 50 years ago.

Order Volume 8 or subscribe to **Supernova** at www.kidsmag.co.za. FREE delivery for all orders!



kidsmag.co.za



Wildlife Photographer of the Year
Highly Commended 2019, Behaviour: Mammals



Big cat and dog spat

Photograph by Peter Haygarth, UK

In a rare encounter, a lone male cheetah is set upon by a pack of African wild dogs.

Both species have disappeared from much of their former ranges, with fewer than 7 000 left of each, mainly due to habitat loss and fragmentation. Both exist at low densities.

Photographer Peter Haygarth had been following the dogs by vehicle as they hunted in Zimanga Private Game Reserve, KwaZulu-Natal, South Africa.

A warthog had just escaped the pack when the leading dogs came across the big cat. At first, the dogs were wary, but as the rest of the 12-strong pack arrived, their confidence grew, and they began to encircle the cat, chirping with excitement. The elderly cheetah hissed and lunged back at the mob, his left ear tattered, the right one pinned back in the ruckus. As dust flew in the morning light, Peter kept his focus on the cat's face. In a few minutes, the spat was over as the cheetah fled.

Hi SuperKids

At the start of the new year, I am putting on a fresh pair of glasses, so to speak, and looking at the people and places around me that I sometimes forget to see... I am surrounded by a city of green and warm summer air, and special people, whose names I may not know, but from whom I always get a smile. In this issue, we take a stroll through some of SA's major cities to feel the unique heartbeat of every place. It is true that 'a place is only as good as its people'. A celebration of our urban sprawls, to me, is also a celebration of our people. But as a society we have to face some hard truths. Ant visits Australia to report on the bushfires that have ravaged the country and saddened the world. The Australian people have lost so much in this devastating tragedy, including much of their natural environment and its unique species. This year let's resolve to be responsible citizens of the earth who act against climate change and take care of our environment and its most special gift, its biodiversity.

Happy reading!

Saskia

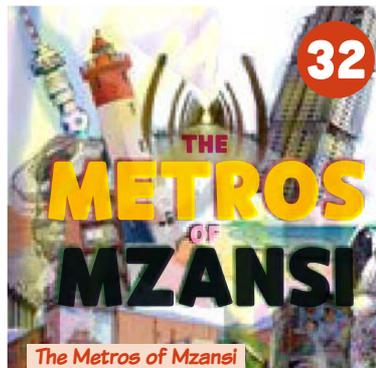
The Features

Disaster Down Under

In June 2019, in the province of New South Wales, lightning strikes started monster runaway fires that ripped through the countryside at a terrible speed. We find out more about Australia's bushfires and the fight to save the animals.



26



The Metros of Mzansi

When you hear the word 'city', you probably think of buildings. But what really makes a city is its people. Just like people, cities can have personalities. Every city in the world has its own mood, vibe, and feel. Climb in your imagination plane and let's get to know some of the cities of South Africa!

32



38

Daily Bread gives us Food for Thought

Have you ever heard of the old adage 'you are what you eat'? American photographer Gregg Segal demonstrates this wise truth in his new book.

ISSN: 2224-1442
EMAG ISSN: 2413-8207
Legal deposit: 02/2020

THE SUPERNOVA TEAM

DIRECTOR/PUBLISHER:
Benoit Knox
benoit@bkpublishing.co.za

HEAD OF PRODUCTION:
Alexander Moolman
alexander@bkpublishing.co.za

HEAD OF EDITORIAL:
Saskia Brits
saskia@bkpublishing.co.za

MARKETING AND SALES:
Siya Simelane
siya@bkpublishing.co.za

SALES AND SUBSCRIPTIONS:
sales@bkpublishing.co.za

For business and advertising enquiries, please contact:
sales@bkpublishing.co.za

www.bkpublishing.co.za
www.supernovamagazine.co.za
www.kidsmag.co.za

Special thanks to our contributors:

- Andrea Vermaak
- Maya Lemaitre
- Su-Mia Hoffmann
- Jessica Colley
- Antoinette Eyssell-Knox
- Chloé Labuschagne
- Nele Schäfer
- Samantha Herbst
- Sawleha Vally
- Henriette Botha
- Dian Labuschagne
- Kendall Behr
- Aimee-Claire Smith



Published every two months by:

BK Publishing (PTY) LTD

Reg: 2015/060893/07

BK PUBLISHING
P.O. Box 6314
Pretoria
0001
South Africa
T: +27 12 342 5347
F: +27 12 342 4117

Printed by:
Novus Print Solutions

Copyright Disclaimer

All work in this publication is owned by BK Publishing or contributing artists/photographers and may not in any way be reproduced without signed permission from the publisher. All credited works reflect the views of the authors and artists and do not necessarily reflect the views and opinions of the publisher. Individual photographers and sources are credited on the pages where they appear. All uncredited photographs are the property of BK Publishing.

Looking for more?



@supernovamag



supernovamagazine

The Regulars

The Pinboard

By you. For you.

6

Photo Feed

Urban Sprawl

8

The Pro-files

Illustrator

11

Andy's Atlas

Hampton Court

12

Money Whiz

Money, money!

14

The Chatroom

Favourite Foods

16

Life, the Universe and Everything

18

Tech Talk

Music DNA

20

Ask It

The Rugby Ball

22

Get Active

Skateboarding

44

The Chill Zone

Tokyo 2020

47



World Environment Day artworks

Sarah Chester-Browne's art class in Cullinan, the Kaleidoscope Kids, did a project for World Environment Day. Here are some of their powerful artworks:



Jules

Our SN community is a group of talented artists, nature lovers and just downright curious kids! We love to showcase your work and share your thoughts and experiences. So, make sure to send your cool creations, questions, thoughts and everything else to us to get it featured here! 😊



'They are going to die out' by Anwyn Oosthuizen (age 10)



'Laaste een in die heeal' by Abbi Pretorius (age 9)



'I'm being poached. They got my mommy' by Kihana Müller (age 9)



'Lion' by Dawid Pretorius (age 10)

Kids2Parks

Visit to Marakele

What did you learn?

Malebo (Grade 4):

Before it became Marakele, it was a farm. The Zulu people chased away the Batswana people, so they hid in the mountains. That is why they say 'Marakele is a place of safety'.

SN ✓

Caroline (Grade 3):

I learned that there are 170 species of snakes in South Africa, and only 20 of those are poisonous.

SN ✓



Caroline (Grade 3):

I learned that there is bush toilet paper. It is called a weeping wattle. I also learned that there is a white rhino and a black rhino. A white rhino baby runs in front of its mother and a black rhino baby walks behind its mother."

SN ✓

Ask Jules?



Alexander (7) asked us: Where do aliens come from?



Jules

Tricky question, Alexander! For you to ask where aliens come from, you first have to ask if aliens exist. I'm afraid scientists have no evidence that aliens actually exist. The word 'alien' usually refers to life that does not come from Earth, or extraterrestrial life. So, if aliens are out there, they will live on other planets, in other solar systems or even in another universe. We still have a lot of space exploration to do before we reach other universes. Who knows? The scientists might find proof of extraterrestrial life in future. 🤖

The Match in Africa



Jules

An easy rally before the match! Roger Federer and Rafael Nadal gear up for the historic Match in Africa in Cape Town, South Africa.

Roger Federer



On 7 February 2020, 51 945 fans were in for a treat when tennis greats, Roger Federer and Rafael Nadal went head-to-head at the Cape Town stadium in the Match In Africa, a charity event that raised a whopping USD 3.5 million (approximately R54.6 million) for education in Africa. It was an even bigger treat to see our own Trevor Noah and Nadal play a fun doubles match against Bill Gates and Federer. Though, Gates and Federer won, Noah says "I have lived one thousand dreams in one night!".

Rafael Nadal



Urban Sprawl

Around local midnight time on 8 April 2015, astronauts aboard the International Space Station took this photograph of Paris, often referred to as the 'City of Light'.

The pattern of the street grid dominates at night, providing a completely different set of visual features from those visible during the day. For instance, the winding Seine River is a main visual cue by day, but here the thin black line of the river is hard to detect until you focus on the strong meanders and the street lights on both banks.

sn **Island Life**
Santa Cruz Del Islote, Colombia

♡ 👤 📌

This cozy little artificial island with a population of 1247 is the most crowded island on Earth. [#helloneighbour](#)

sn **City of Skyscrapers**
Hong Kong, China

♡ 👤 📌

Hong Kong has the most skyscrapers in the world. 303 buildings tower over this city. [#longandstronginhongkong](#)

sn **Ipanema Beach**
Rio de Janeiro, Brazil

♡ 👤 📌

Ipanema beach is recognised as one of the most beautiful (and most populated) beaches in the world. [#grittycitysand](#)

sn **Turbine Interchange**
Florida, USA

♡ 👤 📌

A turbine interchange connects two highways. Can you work out how traffic flows? [#turnlefttogoright](#) [#lifeincircles](#)

sn **Purple Power**
Johannesburg, South Africa

♡ 👤 📌

Joburg has over 200 000 trees. It's ranked sixth in the world in terms of tree density (just one behind Durban). [#boomtown](#)

sn **Los Angeles International Airport**
Los Angeles, USA

♡ 👤 📌

There's a takeoff/landing every minute at the LAX airport. It took over 400 photos to make this photo composite. [#planeasday](#)

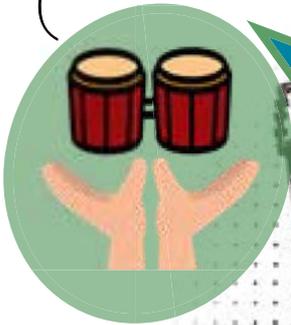
**FUN
FACTS!**

The Timpani



**Do you
want to be a
musician?
Visit our shop
and talk to an
expert.**

'Timpani' comes from the Latin word *tympanum* which means 'hand drum'.



The timpani was also used by popular music bands, The Beatles and Queen, in some of their songs.



Mallets are used to strike the timpani. There are a wide variety of these mallets as each mallet creates a different sound.



The person who plays the timpani is called a 'timpanist'.

Changes in humidity and temperature can result in changes in the pitch produced by the instrument. This is not always the best sound!



**MUSICA
INSTRUMENTS**
WWW.MUSICAINSTRUMENTS.CO.ZA

Six Fountains Lifestyle Centre, Silver Lakes, Pretoria
Tel: 012 991 4930

Illustrator



Hi!
I'm Nes. My job doesn't have an official title. You could say I offer creative solutions for practical art and design.

What is your profession?

Basically, I get to be creative every day. I paint murals, do chalkboards, old-fashioned signwriting, street art, digital design, illustration, commissioned art, event installations and art classes.

I am self-employed and run my own company, called NesNaks Art, from home in Pretoria. I do work for a large variety of clients, like restaurants, coffee shops, hotels, retail stores, schools, corporates, event companies and private guys.



What qualifications/ skills do you need?

I studied graphic design, but there's no official course or theory that can teach you all you need to know.

What do you do on a typical day?

Every day is different. That's the way I like it. Sometimes I'm covered in paint after a big mural project or I have chalk under my fingernails. Some nights I stay up late immersed in illustrations on my computer.

What do you enjoy most about your job?

I love interacting with people, hearing their ideas and helping them come up with a creative way to communicate what they are thinking.

Other days I'm in a workshop with corporates, helping them visualise new ideas. Or I might be working on a commissioned artwork over a few weeks. I do a lot of driving around to the different venues and meetings.

N Nes's advice

Stay passionate about what you do. Have a vision, but let it adapt. Know your values and priorities for life and work. Be willing to take on new challenges. Keep learning and sharing knowledge. Inspire and be inspired.





Hampton Court Palace

A Andy



This royal palace, south west of central London upon the River Thames, is so massive that I spent about eight hours there and didn't get to see everything! I felt like I'd stepped back in time, especially to when King Henry VIII was still alive...

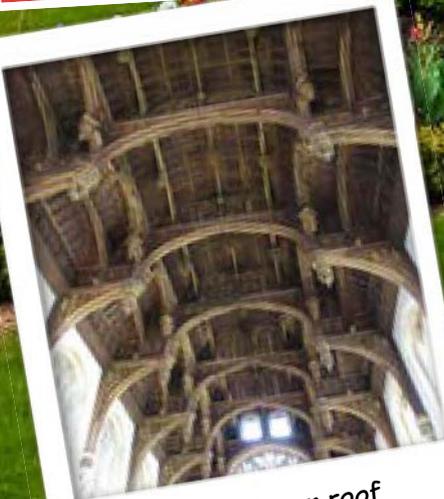
Words by Andrea Vermaak

A Cardinal's Palace

Even though the property dates back to the 9th century, Cardinal Thomas Wolsey began building Hampton Court Palace in 1515. King Henry VIII (the Tudor king who married six times) was Wolsey's close friend and loved the palace. When Wolsey failed to secure Henry VIII's annulment to Katherine of Aragon (his first wife), and realised that his enemies and the king were plotting his downfall, Wolsey gifted the palace to Henry VIII.



Cardinal Thomas Wolsey



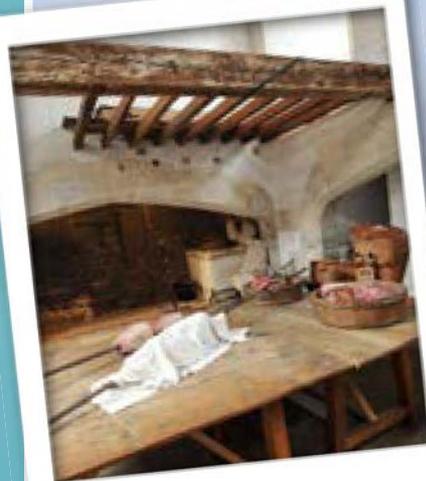
Hammerbeam roof of the Great Hall

The Great Hall

Henry VIII held audience in the Great Hall. It boasts a hammerbeam roof. This means that it has short wooden beams which project from a wall to support a main rafter, or an end of an arch. The hall also boasts a series of tapestries, first hung in 1546. They were woven in Brussels from silk, wool, and silver and gold thread. They present scenes from Abraham's life in the Book of Genesis.

The Great Kitchens

These famous kitchens were enlarged by 400% within the first year of Henry VIII's residence. They are the largest of Tudor England. The 50-room cooking complex includes three huge fireplaces that Wolsey had built. Two hundred cooks produced 800 meals a day for Henry VIII's household.



The Great Kitchens

A King's Palace

Henry VIII remodelled and extended the already large palace. Later, King William III rebuilt and expanded the palace to rival that of the Palace of Versailles in France. Today, the two kings' contrasting architectural styles, Tudor and Baroque, are visible yet harmonious in their pink bricks. King George II was the last monarch to stay at the palace.



Get this!



The palace is not the only large spectacle on the grounds. You'll find a 250-year-old grapevine which is the world's largest grapevine as of 2005. Lancelot 'Capability' Brown, who was in charge of the gardens, cultivated the vine in 1768 from a cutting. In 1887, it had already grown to be 1.2m around the base. It's now 4m around the base. The longest rod is 36m. Its largest crop was in the autumn of 2001, when it produced 383kg of grapes!

The Palace of Versailles

Making sense of Rands and Cents

S Samantha Herbst

In this first edition of *Money Whiz*, chat with SN's resident finance fundi Samantha Herbst about the role of currency in our modern world. PLUS you get to create a unique currency for your own imaginary country.

\$ Money Whiz

Money matters may seem like far-off concerns that will only matter when you are a fully-functioning adult with monthly expenses and home and car loans. The truth is that you probably deal with money more often than you know, aside from your allowance. The idea of money started with just a simple trade (if you give me this, then I'll give you that). Let's explore that which, they say, makes the world go round.

Why do we count on currency?

Money is a form of currency used to pay for goods and services. Before money, people used to barter goods for goods or goods for services. This was before coins became a measure of wealth at around 650 BC.

In the modern world, money helps people distribute, exchange and consume goods and services. It works better than the barter system because it ensures that everyone can get what they need.

Imagine a world without money

Imagine you're a cobbler, and that you have to trade your shoes for food. How many loaves of bread do you think you could buy for one pair of the shoes you make?

The thing about this barter system is, not everyone needs shoes all the time. You'll be hard pressed to find a baker who will accept shoes every month as fair payment. Do you see why money as currency works so much better than bartering?



?! Get this!

The SA mint has created a new R25 coin. The front shows a fossilised skull, neck and shoulder of an *Erythrosuchus africanus* against a stone-textured background.

?! Get this!



Some of the first coins ever produced were Shekels. This coin comes from Carthage (Northwest Africa) from around 310-290 BC.

Your money's worth

Today, each country in the world has its own form of currency. South Africa's currency is the Rand. One Rand can be divided into 100 cents. The Rand comes in seven coins: 5c, 10c, 20c, 50c, R1, R2 and R5, and five banknotes: R10, R20, R50, R100 and R200. These are called denominations.

Similarly, the US dollar (\$), which is the most powerful currency in the world, is divided into five coins and seven banknotes.

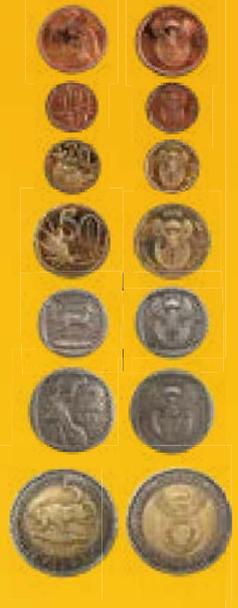
One dollar is worth about R15, but this changes by the minute based on the strength of each country's economy. Isn't it crazy how major world events and political decisions can have an impact on the value of a country's currency?

?! Get this!



Even though the dollar is the world's most powerful currency, the world's strongest currency in 2018 was technically the Kuwaiti dinar (which means that this is the currency with the highest value in the world). One Kuwaiti dinar is worth about R49!

The Rand comes in seven coins and five banknotes



I can do that!

Create your own currency

If you ruled your own country, what would you call your currency? What denominations would you include in your currency? What would its exchange rate be compared to the South African Rand, or the US dollar? When you create your own currency, consider the following:

Include a Coat of Arms.



Each denomination should have its own dominant colour.

Pick a main picture for the front and a different one for the back.

Make your bank note in English, but include at least two other languages.

Little dots should appear on the front and back of the banknotes.

?! Get this!



Look closely! We discovered some very interesting features when we zoomed into the banknotes. Can you discover anything interesting on your notes at home?

SPECIMEN

When the banknotes are tilted, the security thread will change to a different colour that is unique to each denomination.



Make sure the denomination numeral is clearly visible.

There is raised print on the bottom left- and right-hand sides on the front of all the banknotes for the visually impaired.

Is your favourite food a food habit?

Words by Sawleha Vally

Illustration by Henriette Botha



The Chatroom

We eat a variety of foods throughout the day – healthy and unhealthy – but there are some foods that become our favourites. We don't always eat our favourite foods every day. Sometimes, these favourite foods become family food habits: pizza night, Sunday roast, or Saturday morning omelettes.

Has your favourite food become a family food habit? Let's take a look at what you have to say!



LEAH LIEBENBERG (5)

My favourite foods are pasta and fish fingers. We have take away once a week.



ABIGAIL VAN ZYL (12)

My favourite food is sushi. Our food habit is Sunday roasts.



RU-ANDRIE HYDE (10)

My favourite food is french toast. Our food tradition is McDonald's on Friday.



YUSUF SALLIE (11)

Tomato bredie is my favourite food. Our food habit is a Saturday morning omelette.

AYALAKHA MOKOENA (10)

My favourite food is pasta. Our food habit is movie night with pizza.



SARAH MEYER (9)

Sushi is my favourite food, and our habit is Sushi Night on Fridays.

KAYLEIGH LIEBENBERG (9)

My favourite food is burgers. We have take away once a week, normally pizza.



DANAE' HAYMAN (10)

My favourite foods are pumpkin, carrots, broccoli with cheese, and McDonald's Chicken Burger. Our food habit is burger nights on a Friday.



HANNAH KNOX (4)

My favourite foods are pap and wors, and spaghetti bolognese - when my dad makes it! Our food habit is cheesy omelettes for breakfast!



Have your say!

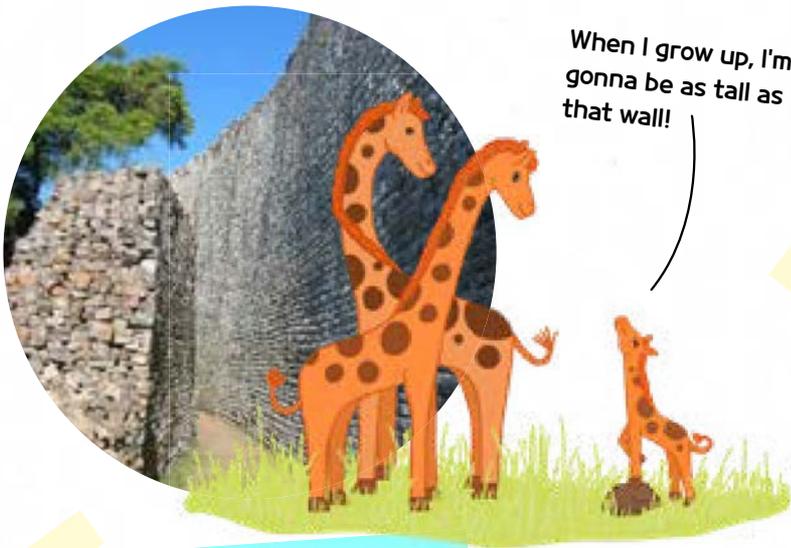
Do you want to contribute to the next Chatroom? Follow *Supernova* magazine on Facebook or subscribe to the SN newsletter and look out for our questionnaires.

Lost Cities

History or legend, these places are lost to time. Maybe you didn't know...



I TOLD you it was stone!



When I grow up, I'm gonna be as tall as that wall!

Vanquished by volcano

In 79AD, Mount Vesuvius in Italy erupted. **Pompeii and Herculaneum** were covered in a thick layer of ash from the eruption. People, animals and even food were perfectly preserved under the ash!

Talk about security!

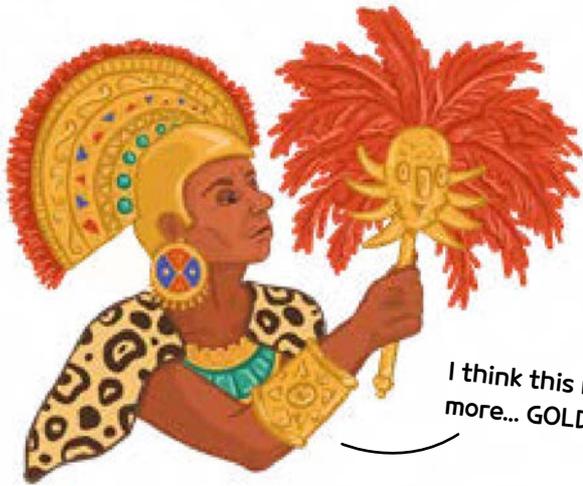
The **palace of Great Zimbabwe** was built in the 17th century by the Gokomere people. Its walls are five metres high!

Alternative housing

In the **Mesa Verde National Park** in Colorado, USA, there are over 600 uninhabited cliff dwellings! They were inhabited by the Anasazi people from the 7th to 14th century.



Go on holiday, they said... Your house'll be fine, they said...



I think this needs more... GOLD!

You're so vain!

El Dorado, the lost city of gold, actually never referred to a city at all. The Spanish misunderstood the whole thing! El Dorado referred to the 'Golden One': a legendary king so rich that he covered himself in gold every morning and then washed it off in a sacred lake every night.

But I wanna know what happens!

The story of **The Legendary Lost City of Atlantis** comes from two books written by the Greek philosopher Plato. He claimed that it was a true story. Unfortunately, the end of the second book was lost. We'll never know how the story ends!



...so that's why they can't find us!



And don't you dare float through our neighbour's living room walls again!

To coal it quits...

The abandoned Japanese island **Hashima** used to house a busy coal-mining community, but they all upped and left in the 1970's when the need for coal decreased. All that's left now is an eerie ghost town.

#I'm_Staying!!!

Those brave female farmers

After the catastrophic nuclear meltdown at **Chernobyl** on 26 April 1986, it was declared illegal to live in the area. Despite this, about 150 people live there today! They are mostly women in their 70s and 80s that farm on land that has belonged to their families for generations.



MUSIC and synthetic DNA

Words by Saskia Brits

Massive Attack releases an album in a spray can!

The music of Massive Attack's first album, *Mezzanine*, may very well exist for future civilisations in the form of DNA, says band member and artist Robert Del Naja. The band announced a limited-edition spray can which contains about one million copies of the album encoded as strands of synthetic DNA. Del Naja also created an artwork that was ink-jet printed using ink that contains the album's DNA.

With the help of scientists at ETH Zurich, the band adapted earlier technology and used chemical techniques to turn the album's digital audio into genetic code. This genetic information was stored using the four building blocks of DNA. Scientists say it's like natural DNA, but has no useful genetic information.

There's an entire music album stored inside!



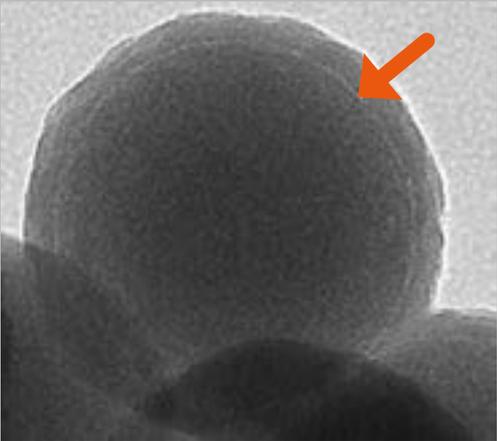
```

TG TAGTTCGAGC CAGCCATATCAGGTAACGCTTCGGGTTCGTCATCTLCAGAAATAACTTTAAAGCCCAAGGGTAGC TGCCTA
AGTCTAC TAGC CAAGGSCCTGFAARCCCTTFAALCALCCCTTCGCGTGCAGCAGCGGTAATTCATGTATGTACGTGCGCGAA
TTCTCGCTAACTTCAGCGGATGCTATTCCTCCGGAGAACCTTCTGCTAC TACCCAGATACCCAGGAGCTTGTATACACTGCGCC
GATANGTCTCGCTAATTTGTTTGTACGATGCTTAACACAGGCGCCAGAGATACCCACATATCGAARATACCCAAACACT
GGAGCAGATCATCGAACCGATTTGCATATAGCGGAGTAGGTATGGCTTTTCGGACTC TFGGGCTGCACTGAAGGTAACATT
CTCTACTCTACTTTCTAAC TGAATGTCGAC TTAGGCTCGAATTCCTGCTCATGCGGCGCACGGGTGCCGAC CAG
TCGTTTGGGAATGGTTTCGGCCCTCAAGCTAGGACTTCTCAATCACTCGGGCCCLGTGCGGTAAACTGCTCTGGCCTTGATG
TTTAAAGCGGTTAGGATCTGCTCTCACTTGTGGGAGTAAC TACACGGCTACCTCTCTCTCGGGARATAGGCTTCCCGGTGAGT
GGCATTGTGTGCTTTATCGAAC TAGAAGCCACCTTATTTGTCGGAGGCGAAGCATATTGGATTTCTCTCTCTCTAAN
AATATATCTGTTATTTATCAATTTCTTACTTTGTCACAAATTTGTCCTCACGACATTACACCTGTGTGFAAGGCGGATA
ACGTGAGTCTCTTCTATATGATGAAATATGACCTGTGAGGTTGGCAGGAGGAAATAGGAGATTTGTGACTCTGAC
TATAGGAGGTTACGCGCTGCTCTGTTTAACTTGTGAAC CAGTGTGCTGCTTAAAGCTAGTATAGTAGAGGCTGGGATT
CCGAGACACTTACTTAACTCTTATTGCAACAGTGGACTTTTGGCAACTCFANGTCTTAAATATCTCAACCTGACGGT
CAATTGGCATGAGTCAATCTGTTGGAGCTTASGACTTACAGACTGGCTCAAGCTGGTAAACACCACTTCCCTTAGGGT
TTGCTACCTTTAGTCAAGCAGTAGGAGC TGAAGCTCTCATTCGCGGCTTCTCAACCATACGATGGAACTGGGAGT
GGGTAACTGTTTGTAGGACTCGAGGCTGAAACGGGCTCCGACATATTAAATTTAAAGCTATAAACCTCTCTCCCTGG
CCAGTCTCTGGCTATAGGACTCACTGGGCTACGATATGCTTCCATLGTGLACACTCTCTGACTCATCCGGG
TGACCTGGCAGTGCATTAACCGAAGTATTGAGCTTGGGATAGGAGCCTGGACAGTCAAC TTAAGGCTTAAT
ACAGGAGGCGAAGTACAGUATGATAATATCAGGTTCTATGGTTCCACAGTACAGAACTGCTCTGTGCGGGCCAT
TCTGCTCGAGGCTGGATCTTAGGCTGAACTCGAGCGAGTGCATCTCTCAATCGATTGCGGTTGGCAGTGGCTTCCACC
CTAGGAGCGGAGCAGGACTACTTAAATTTGCTTATGCTTCAATCAACAGCTGCTGAGAGGCAAGTACATA
ATTAGGCAATTTCTATTCCTGCTGGGAGTCTCGGGTAAACCTCAAGTATCAACCTTTTAGCANGAATLCCACATAGT
GTGATCGAGCTGGGACACAAACATTTCAACTGTAAACACAGGCTTGTGTCGATTAACCTGTACCTCTCTGCTCA
FATCAACTCTCGGCTTAAAGACTAAGGCAACTTTGCAATTCGAGAGCTTTTGGCGAGGCTTACACTGGGCTAAGTAA
TGGTAGCATTGTCGCTAGTATGACTGGCGGCTTAAAGAGACCTCTCGCTCGAGGCTTAATCEGCTCATATTA
TTGCTTAGATTACTTTTGTAGCTCLGGAGAACTTTTCTCACTTAAAC TCGTTAAAGCTTCTCTGTAAP TAGTTGCT
CCTCGAGGCTGAATCGGCTACAGGAGTCTAATCAGAGTCTACAGTCTTGTCCACAGGCTTATTACAGGCGAAGTAT
CGGACAGCAATGTATACAAAGGCTAGGCGCGGCTGATTCCCGCATTCACCGCTAGAGCCGAACTGAATGTAGATT
TTATTTTGGAGCTCGAGGCTGCTTACTTTATGGGCTTCCGATATTGTTATGATGATGCTTCTCAACATAAT
GGTCCACTCAACTGATCAGCGGCTGCGGAAAGTGGCAGGCTGAGTGGATCGAAGAGAGGAGAGTCCGCTGCGCTTGTTL
TTTTAGGCGCACCAATACCAATCGGCTGCTTATATTCGATGTATAGGCTCTGCTGGCAGGCGGCTCTTGGCTAT
CGGTTTCTCGGCTGGATCGGCTGATAGTCCAGGCTTAGGTTTCAACTGTTTAAACAGGACTTAGGTAAGCAAC
GAGACTGAAAGAAATCATGGTGGCCCGCTGTTGTAATTCACACTTACCTTATGAC TAAATAEGCATATTCAACACTAG
GTTCTCGTGTGTAGGCGCTAAACATGCTCTACTTCTGATGCGGGGCTTAGTAAACBACAAATTAGACTTAGT
FACCACTCAACACTCTTAGGCTTCCAGAAAGGCGGACCTCAACTAGCGGGGAGCTCACTTGGTAAACACCACTAC
TACTTCACTGGCTTATGGGATCTGCTGGGCTTTCAGGACAGGCTTTCACAGT TACTCACTATCTAGAGACCGGCTAT
GAGCTGTGCGATCTCAAGCGAAACACACCGGAGTCACTGTTGGTATGCACTGATGTTAGTTGGTGGTTTCCGCACT
CATCTAGTTAAGACTGCTACTTCACTCTGCTCACTTATGCTTACCTGCTCTGCTTAGGGCTCTCTATATGGCTT
ACTTTCGGTAGGAGCTAGGCACTTAAACAGTACGAGATACAGTGTCTAATACCAAAATACTCACTTTCGGCTTCCGTAAG
ATACGAGCTGCTGGTACATTGGGCTCACTGCTGAAAGGCTTTCCTGCTGCAACTCTGAACTCAGGAGGCTCGACTA

```

(Image: ETH Zurich / Robert Grass)

Mezzanine's 'genetic code'.
 This section corresponds to
 1/27000 of the information of the
 whole album.



(Photograph: ETH Zurich / Robert Grass)

This may seem like something thought up by a science fiction writer or a space-age movie director, but the idea of storing information on DNA has actually been around for a while, as it was thought up by Russian physicist Mikail Neiman in the 1960's. It was only in 2012 when biologist George Church successfully encoded one of his books in DNA.

Scientists explain that, though it is very expensive to code digital DNA, we can make millions of copies of the Mezzanine album for free. Besides this, we are able to store loads of information on only a few milligrams of DNA turning it into a great solution for archiving what we know.

Microscopic image of a glass sphere with a diameter of 160 nanometres. The DNA molecules that store the audio information are in the thin, bright layer (arrow). The music of the whole album requires 5 000 of these spheres.

Artwork created by ink that contains the album's DNA.



Everything tells a story. All you need to do is ask!
We did a pre-match interview with a...

Rugby Ball

Words by Kendall Behr

Illustration by Nele Schäfer

THAT'S JUST HOW HE ROLLS...
GILBERT SHARES HIS 'BEST' MOMENTS ON THE FIELD.

It's moments before the World Cup 2019 final, I'm on the pitch in Japan, nervously waiting to interview one of my biggest heroes: The South African rugby ball, Gilbert! He's finishing up his last warm-up lap around the field.

If you've ever hung out with this tough guy, you'll know that he packs a punch, his skin's texture feels like a shark's skin, and he can get pretty aggressive. You might not know that he's closely related to the soccer ball, that he loves bringing people together, and that his ancestors are from England.

Here he comes now!
I can't wait to meet him and find out more about this South African celebrity.



You are an icon of South African history, but your great grandfather was born in Britain. Can you tell me more about his life and how your family came to South Africa?

Hey, ja man! I've an English family but I'm true South African! My great-great-grandfather was the first football that got squished into a rugby ball and played on Rugby Schools' football fields. When those Brits colonised our great land, my granddad came too.

Rugby was an important part of the English school system at that point, and even Dutch kids went to English boarding schools. Slowly, as the Afrikaans culture developed and it turned out we Saffas are really good at the game, my Pa and rugby became a massive part of Afrikaans culture too. After 1995's fantastic World Cup, all South Africans can back our boytjies with pride, and here I am!

Wow! Your logo has changed a lot over the years. What's your favourite one?

Yeah, no hey. We got a brand-new logo at the 1995 World Cup, which was awesome. But we have a really cool World Cup 2019 ball. It's a homage to both Japan and South Africa, and I think it's my best. I'm so enjoying wearing it here in Japan.

And how does it feel to be taken home by the player of the match?

It's such an honour for me, hey. I just feel so privileged to be taken home by the likes of South African players, like Faf de Klerk and RG Snyman, and the legend Beauden Barret. But, whoever I'm with, it's always special to know that I represent South Africa and the wonderful and diverse people that share our home country.

What's your favourite part about playing rugby?

The try, any day. The tension as the forward player and I are running through the gaps and dodging tackles, that perfect moment when I get slapped down on the grass just past the try line, and the roar of the crowd in the stand that echoes those back home. Joh, what a rush! Nothing like it, hey.

At that I see Gilbert is itching to get ready for the final. I head off the field to let him get his rest before his moment of World Cup glory. I am so chuffed to have met such an awesome icon who has been bringing people together all over the world for more than 25 years.

Hidden Pictures™



More Hidden Pictures™ are available at kidsmag.co.za





hot dog



paintbrush



ice-cream cone



leaf



spoon



toothbrush



pickle



crescent moon



slice of pizza



banana



fried egg



hat



Solutions on page 47

©Highlights™

Words by Antoinette Eyssell-Knox
Illustration by Benoit Knox
and Dian Labuschagne

Disaster Down Under

Australia's bushfires and the fight to save the animals

For weeks, I have been glued to my screen, reading and watching how bushfires have ravaged the country of Australia. My heart has been sore, for the hundreds of people who have lost their homes and loved ones to the fires.

But it's the terrible loss of animal life that has affected me the most. Seeing the images and hearing how 1.3 billion animals have died has left me sad and angry and asking lots of questions.

How did these fires start?

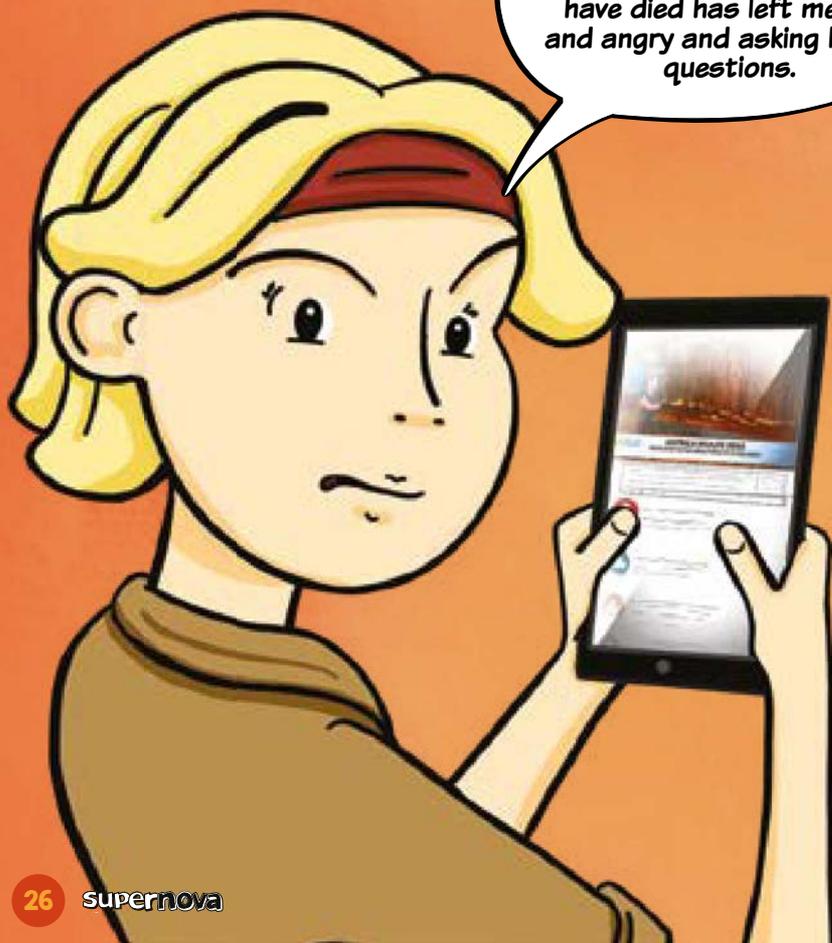
What does climate change have to do with them?

Why are fires like this happening all around the world?

What hope is there for the biodiversity of Australia?

What lessons can we learn?

What, if anything, can I do about it?



The 2019–2020 bushfire disaster

In June 2019, in the province of New South Wales, lightning strikes started monster runaway fires that ripped through the countryside at a terrible speed. The fires were fanned by high winds, causing walls of fire and ember rains (burning hot ash).

Although there were heroic efforts by firefighters, by February 2020, the fires were still raging in some areas. 1.3 billion animals were estimated to have died. Entire towns were devastated and nearly 2800 homes were lost. People were evacuated, but still over 34 people lost their lives.

Over 186000 square kilometers (km²) were burned. That's an area nearly ten times the size of the Kruger National Park. Over one third of Kangaroo Island, a biodiversity hotspot, has burned, killing over 25000 Koalas and many other species.

How does climate change fan the fires?

The fossil fuels and toxic gases that allow us to have modern luxuries, electricity, fuel for our cars and farming, all contribute to the greenhouse effect. The greenhouse gases, carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O) trap heat from the sun in our atmosphere. This trapped heat causes global warming.

All around the world, weather patterns have changed and natural disasters have gotten worse. Although fires and drought have always been a part of Australia, scientists agree that this is made worse due to man-made climate change.



?! Get this!

The smoke from the fires was so intense NASA tracked it as it traveled 11 000 kilometres over the oceans to South America.



Major fires around the world

Australia isn't the only country to experience extreme runaway fires. Over the last few years, there have been uncontrollable fires in many countries. All were made worse by long periods of drought followed by strong dry winds.

The Amazon (Brazil)

Over 9060 km² were lost to fires in 2019. These fires were mostly started by people.



Siberia (Russia)

The northern areas of Russia saw over 30 000 km² burn in 2019.



California (USA)

In 2018, 103 people died and 23000 buildings were destroyed.



Attica (Greece)

The 2018 fire was the second most deadly in recent history. It killed over 102 people.



Knysna (SA)

In 2017 deadly flames took seven people and over a 1000 houses. This was SA's worst fire disaster.



Fighting for survival

Over a billion animals have died in the fires. Some have lost their breeding grounds and many simply don't have anything to eat. Some animals were already facing extinction and now the threat is even bigger.

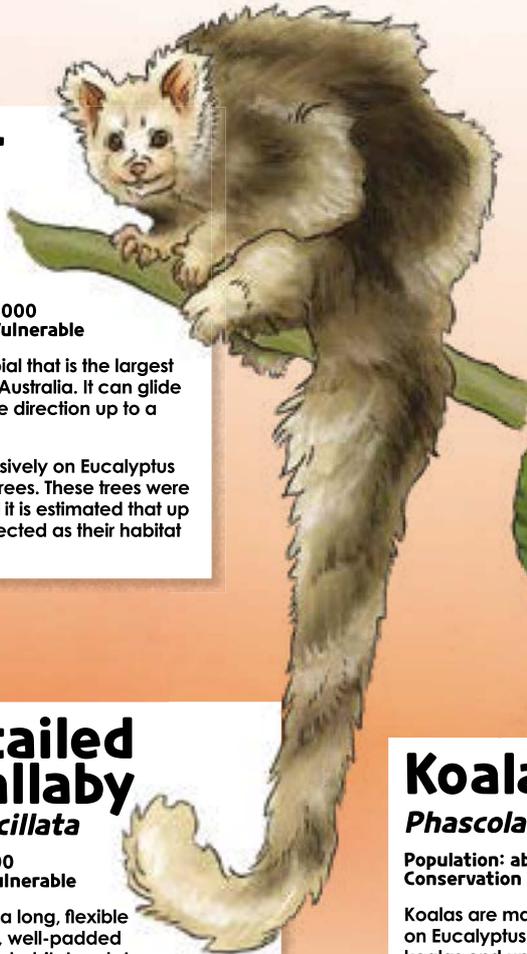
Greater glider

Petauroides volans

Population: about 500 000
Conservation status: Vulnerable

A tree-dwelling marsupial that is the largest of the glider species in Australia. It can glide up to 100m and change direction up to a 90-degree angle.

They feed almost exclusively on Eucalyptus leaves and nest in the trees. These trees were burned by the fires and it is estimated that up to 90% of the area protected as their habitat has been destroyed.



Western ground parrot

Pezoporus flaviventris

Population: estimated 150
Conservation status: Critically endangered

This parrot lives on the ground and is rarely seen. It prefers areas that went unburnt for long periods of time and likely only occur in the Cape Arid National Park.

A lot of the ground parrot's habitat has been destroyed by the recent fires.



Brush-tailed rock-wallaby

Petrogale penicillata

Population: about 30 000
Conservation status: Vulnerable

This agile marsupial has a long, flexible and bushy tail and short, well-padded feet to navigate its rocky habitat and steep cliffs.

Although its original range has declined, it is still common. They seem to survive the fires. Australians are dropping sweet potatoes and carrots from helicopters in an effort to help them survive.



Koala

Phascolarctos cinereus

Population: about 300 000
Conservation status: Vulnerable

Koalas are marsupials (not bears!) that feed almost exclusively on Eucalyptus leaves. This is a low energy food source and koalas end up sleeping around 20 hours a day!

Koalas are slow moving and their only escape from fire is to climb higher into trees. The intensity of the recent fires killed many koalas and their food source. Local populations may go extinct but the Eucalyptus will re-sprout and koalas will resettle once the vegetation regenerates.



Glossy black-cockatoo

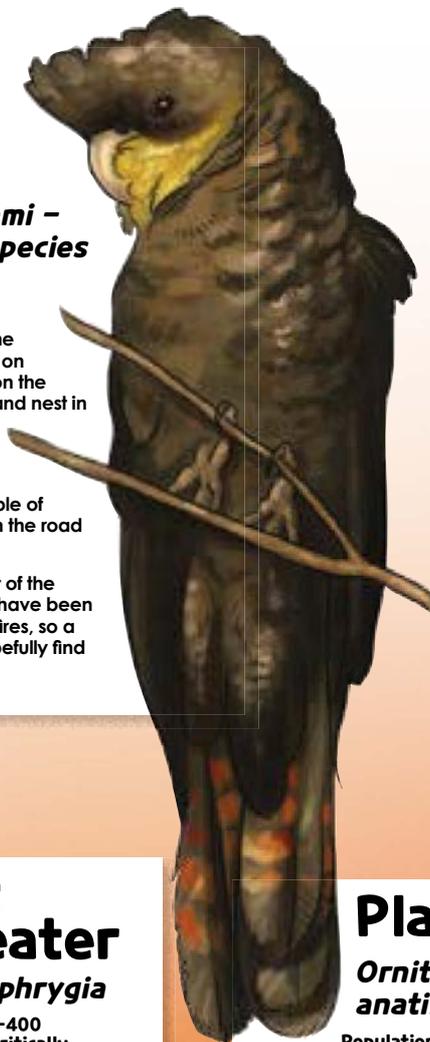
Calyptorhynchus lathami – Kangaroo Island sub-species

Population: 400 (before the fires)
Conservation status: Endangered

The South Australian subspecies of the Glossy Black-Cockatoo only occurs on Kangaroo Island. They feed mainly on the seeds of the drooping sheoak tree, and nest in hollows of Eucalyptus trees.

Twenty years ago, there were less than 150 of these birds left. Thanks to conservation projects by the people of Kangaroo Island, this species was on the road to recovery.

Tragically, fires have destroyed most of the flocks and breeding grounds. There have been some sightings of the birds after the fires, so a number has survived and would hopefully find enough to eat.



Quokka

Setonix brachyurus

Population: about 15 000
Conservation status: Vulnerable

The Quokka is one of the smallest Wallaby species in the world. The Quokka creates tunnels that they use as runways through the dense vegetation. Their preferred habitat is long unburnt riparian vegetation and swamps.

The Quokka occurs on two offshore islands (Rottnest Island and Bald Island) and several mainland sites in south-west Western Australia. Fires destroy their habitat and food source.



Regent honeyeater

Anthochaera phrygia

Population: about 350–400
Conservation status: Critically endangered

This black and yellow honeyeater depends on the nectar-rich flowers of certain Eucalypt and mistletoe species. They also play an important role in the pollination of the Eucalyptus trees.

The already low population is further threatened by the fires, which destroy their nesting habitat and food source.

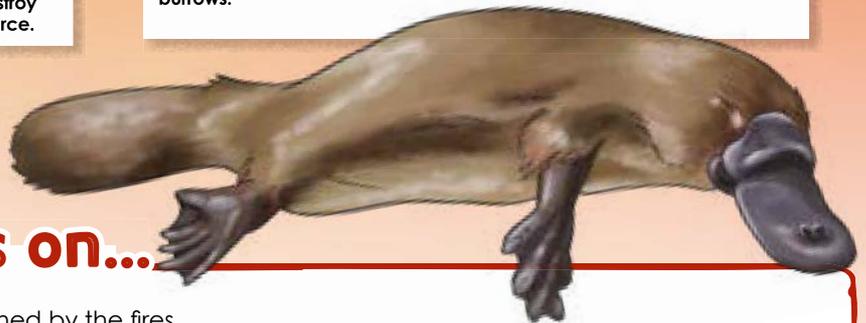
Platypus

Ornithorhynchus anatinus

Population: It is difficult to estimate due to their shy nature. Their numbers are decreasing
Conservation status: Near threatened

This egg-laying mammal (strange but true!), lives in freshwater bodies that have earth banks with roots and overhanging vegetation, suitable for their burrows. They eat live prey such as water insects and crayfish.

The reigning drought has dried up much of their habitat, while fires destroyed the vegetation around waterbodies and subsequently their burrows.



The list goes on...

Many more animals are threatened by the fires. Some have not been seen since in some areas.



Short-beaked echidna



Dunnart



Flying Fox



Rosenberg's goanna



Green carpenter bee

What is being done to help the animals?

One positive thing that has come out of these fires is the amazing support that the communities are providing to animals in need.

- Volunteers have been working tirelessly giving care to hurt animals. People from all over the world have donated money to organisations that are helping. The money has gone towards medical equipment and food as well as rescue flights.
- In some remote places, officials have been dropping food from helicopters for starving animals on the ground.
- Humanitarian groups have also searched burned forests looking for animals in need. Some even rescue baby kangaroos, called joeys, out of their dead mothers' pouches.
- Australians have been asked to keep water containers outside their homes for animals and birds to drink from for the next few months and to allow animals to eat from their fruit trees.



What can we do to stop the fires?

A wall of fire is impossible to stop and even the bravest firefighters struggle to keep ahead of the flames. So how do we stop the fires?

- We can use more renewable energies that don't pollute the skies.
- We must always be fire safe. Don't play with fire and don't make fires in natural areas.
- Help in community efforts to get rid of alien invasive plants. These often burn hotter than the native plants in your area.
- Always report fires. If you see a fire, it's your duty to contact the local fire department. In South Africa you need to phone the emergency number 112.



?! Get this!



Working on Fire
Working on Fire is an organisation that recruits young South Africans to help manage and control fires. There are currently more than 5000 participants, 31% are women (the highest level in the world).



Will the world learn from these disasters? Or, will they become part of our lives from now on? One thing I have learned is that we can't continue to hurt the planet.

If this disaster doesn't get the world to start taking climate change seriously, what will?



MAKE A KOALA CARE FIRE SAFETY POSTER

What you need:

- Coloured paper or foam board. You'll need grey, pink, black and white for the Koala template.
- A marker
- Scissors
- Pencils
- Glue stick
- Ruler

Choose a template

Download one of our cute templates from supernovamagazine.co.za/koalacare

Print

Print the template onto the correct coloured paper.

Snip snip snip...

Carefully cut out all the pieces.

Build a bear

Glue each of the pieces together, layer by layer.

Spread the word

Write a message about fire safety and decorate your poster.



?! Get this!

In case of a fire emergency:
 112 - all emergencies
 10111 - all emergencies
 10177 - fire and medical

?! Pro tip!

Make your animal out of coloured foam board to make a more durable poster.

Words by
Aimee-Claire Smith

THE METROS OF MZANSI

Get to know each SA city's unique urban pulse

When you hear the word 'city', you probably think of buildings. But what really makes a city is its people. Just like people, cities can have personalities. Every city in the world has its own mood, vibe and feel. Climb in your imagination plane and let's get to know some of the cities of South Africa!

The City of Gold

Johannesburg (aka Joburg, aka eGoli (isiZulu), aka Jozi)

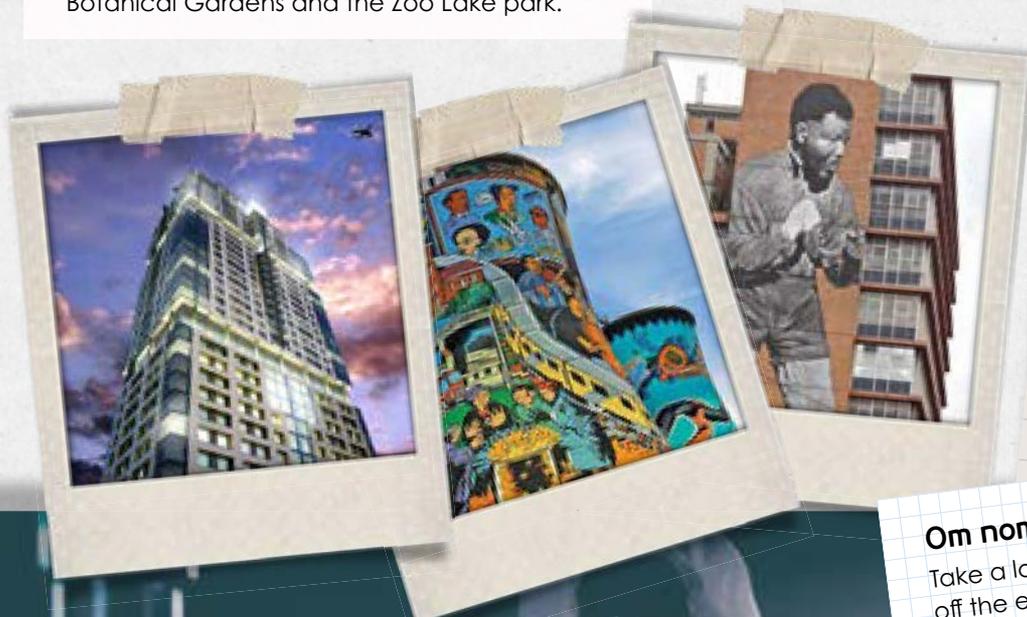
The Vibe:

Johannesburg lives by the 'work hard, play hard' motto. There are bookshops, old record shops and art galleries mixed in with all the electronics shops, tall office buildings and fancy malls. And even though it's a city of business, there's also a lot of nature. Joburg is one of the biggest urban forests (a city full of trees) in the world, and there are calm places where you can escape the hustle and bustle, like the Walter Sisulu Botanical Gardens and the Zoo Lake park.

I love how liberating living in Johannesburg feels. There's an openness to creativity and you're bound to find a tribe of like-minded individuals who can help bring your vision to life, or just be there to support you and that's one of the most beautiful things I get to experience.

Moonga Kapambwe (24)

Joburg local



How many people live in Joburg?

13.774 million
(or about enough to fill
28 000 aeroplanes)

Om nom nom...

Take a loaf of bread. Cut a quarter off the end. Hollow out all the soft bread in the middle. Stuff it full of chips, cheese, polony, egg, and atchar (a spicy chutney). Voila! You've made a kota, also called a spatlo.



?! Get this!

Joburg is home to the tallest building in Africa, a skyscraper, named The Leonardo, in Sandton. It is about as tall as 113 giraffes standing on top of each other!

The

Mother City

Cape Town (aka Kaapstad (Afrikaans) aka iKapa (isiXhosa))

The Vibe:

Cape Town is artsy, chilled out and very popular. A lot of the people you meet in Cape Town are tourists from Europe, America or other parts of Africa. Many of the other people have moved to Cape Town from somewhere else. Capetonians love to surf, skateboard, hike and of course spend time on the beautiful beaches. A lot of Capetonians work in the film industry, advertising or marketing.

I feel like Cape Town always has a surprise for me. There's always something to sweep me off my feet, in a good way or a bad way or sometimes both. And it has that perfectly-strung energy that calms my anxiety and gets me all charged up and excited for life at the same time.

Aimee-Claire Smith (21)
Cape Town resident

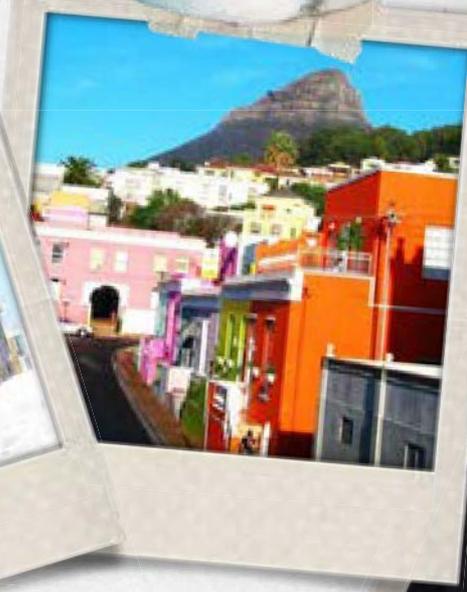
How many people live in Cape Town?

3.81 million
(or enough to fill 19 050 aeroplanes)



Must see!

Table Mountain (originally named 'Hoerikwaggo', which means 'mountain of the sea', by the Khosian people of the Cape) is the biggest tourist attraction in Africa. Over 855 000 people from around the world visit Table Mountain a year!



?! Get this!

The first human heart transplant in the world happened in Cape Town, at the Grootte Schuur Hospital.



"It's the richness of cultures that makes Cape Town such an exciting place and gives it its creativity."

- Karen Dudley, chef living and working in Cape Town

The city of Jacarandas

Pretoria (aka ePitoli (isiZulu) aka Tshwana aka The 012)

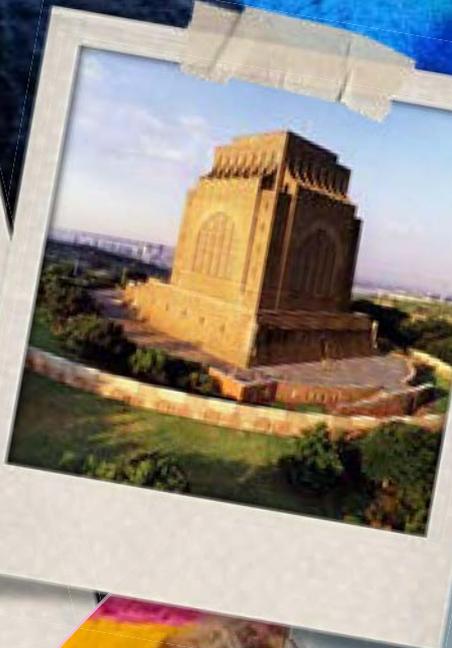
Supernova's home city!

When I think of Pretoria, I think of a place that celebrates spring by dressing up in all shades of pink and purple. We are known for the Jacarandas and we are proud of them. When I think of Pretoria, I think of home. Pretoria is a place that can be very busy, very vibrant, and very alive if it wants to be, but it can also be calm, peaceful, patient, slow. It's a whole big mix of diversity, and it's beautiful. Pretoria does have its flaws; it's got a long way to go. But what that means is that Pretoria is a story that is still being written.

Puno Selesho (24)
Pretoria local

The Vibe:

Pretoria is the perfect mix of urban chaos and suburban peace. The sprawling Capital City is a place where residents move in and stay for years. From Monday to Friday, it's business as usual, but come the weekend, locals find rest in its parks, botanical gardens and reserves, and their own backyards by having a braai, watching the game and soaking up the hot, sunny days.



Must see!

The Union Buildings in Pretoria is where the South African government holds office. The building is surrounded by the Union Gardens where there's a huge statue of Nelson Mandela, that is also the biggest Mandela statue in the whole world. It's nine metres high!

How many people live in Pretoria?

2.125 million. That's almost enough to fill 10 625 aeroplanes!



The Surf City

Durban (aka Durbs aka eThekwni (isiZulu))

The Vibe:

Durban is sunny and lively in its own way. Durban has a rich and colourful culture that is represented by its multi-cultural locals. Durbanites love to dance, especially to *gqom* music, which means 'drum' in Zulu. It is a South African electro style of music. There is no SA resident who can stomach a seriously spicy curry quite like a Durbanite. And, of course, there is a passion for surfing. Also, true locals wear slip-slops – all the time!

How many people live in Durban?

3.8 million. That's almost enough to fill 19 000 aeroplanes!

It's quite a sleepy town. Everything is a lot more relaxed than Cape Town or Joburg. There's a fairly close community, so, if you grow up in Durban, you end up knowing everyone. Your 'Durban accent' will always be made fun of, so you just have to learn to live with it.

Fern (20)

Durban local

Citrus City

Mbombela (aka Nelspruit, aka eNaspoti, aka Gateway to the Lowveld)

The Vibe:

What was once considered a *dorp* in the middle of rural farmlands on the way to the Kruger Park, is now seen as a fully developing city. It is still small enough to be provincial with a close-knit local community, but large enough to have whatever you need right around the corner.

I'd describe the vibe as "small town", but that's definitely changing. Everyone stills knows everyone, and they're all very connected. I'd say most people who live in Nelspruit want to settle down, have a family. They call it the 'Slowveld' for a reason.

Zanna (22)

who grew up in Nelspruit

How many people live in Mbombela?

58 670 (or enough to fill 300 aeroplanes)

A city can be a magical place. Cities have histories, mysteries, and surprises. And, cities are always growing and changing. What do you love about your city (or town)? Send us a letter or email telling us about your city, or a drawing of your favourite place in your city, at mail@kidsmag.co.za and it may appear in an upcoming issue.

Make your own city map

To make your very own city map, you need:

- Paper
- Pencils and pens

Imagine if you could design your very own city. What sort of places would be in your dream city? What sort of things would people do in your dream city? What would you name it?

People who design cities are called urban designers, and people who make maps, are called cartographers. Why not try being both?

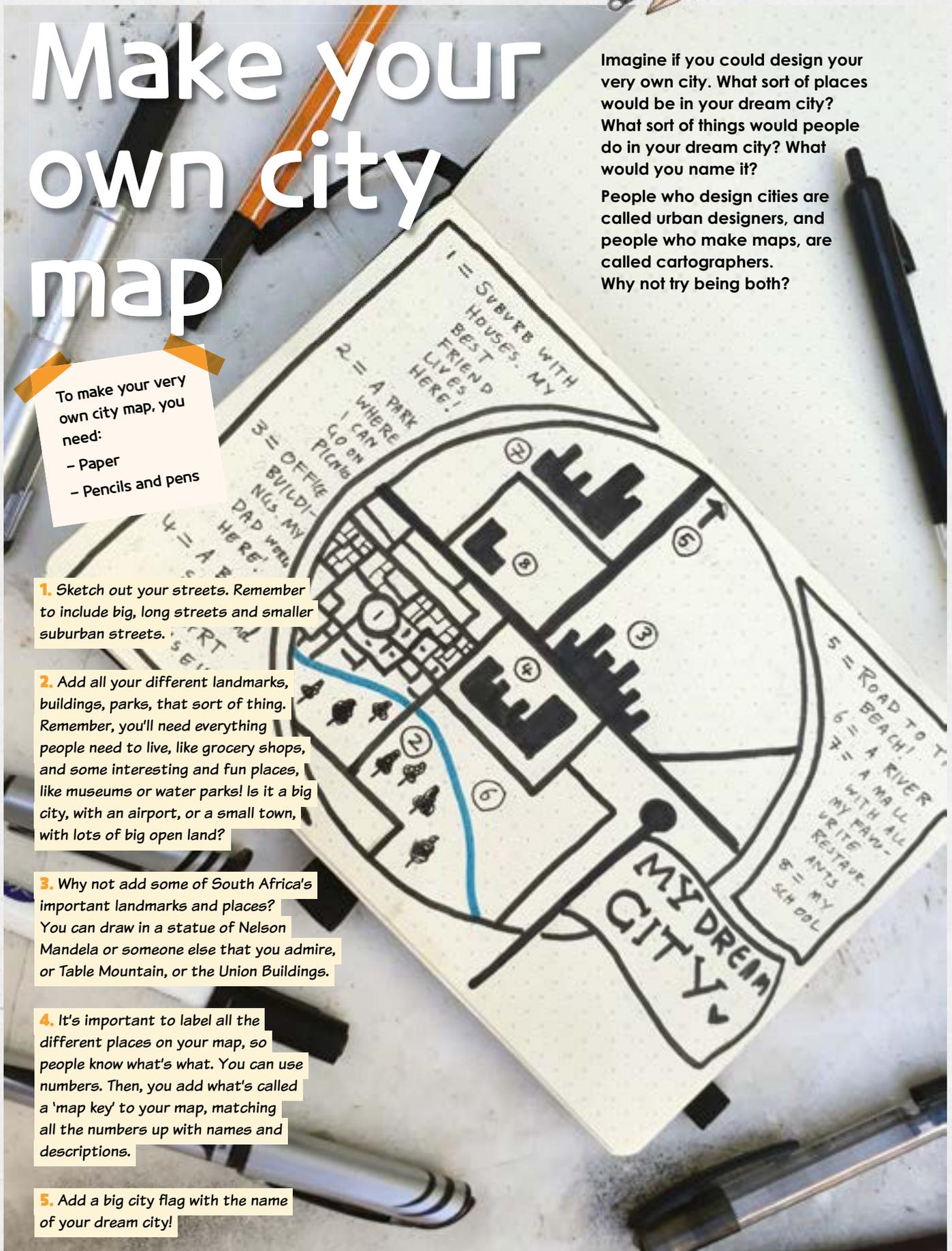
1. Sketch out your streets. Remember to include big, long streets and smaller suburban streets.

2. Add all your different landmarks, buildings, parks, that sort of thing. Remember, you'll need everything people need to live, like grocery shops, and some interesting and fun places, like museums or water parks! Is it a big city, with an airport, or a small town, with lots of big open land?

3. Why not add some of South Africa's important landmarks and places? You can draw in a statue of Nelson Mandela or someone else that you admire, or Table Mountain, or the Union Buildings.

4. It's important to label all the different places on your map, so people know what's what. You can use numbers. Then, you add what's called a 'map key' to your map, matching all the numbers up with names and descriptions.

5. Add a big city flag with the name of your dream city!



Daily Bread

gives US **Food** for **Thought**



New book makes us rethink our food choices

Have you ever heard of the old adage **'you are what you eat'**? American photographer Gregg Segal demonstrates this wise truth in his new book, *Daily Bread: what kids eat around the world*.

He travelled the world and asked kids in many different countries to keep a food diary for a week to record exactly what they eat. Afterwards, he would photograph them with their meals.

The purpose of this book is to inspire people of all ages to maintain healthy diets, because eating habits are formed when we are kids but last a lifetime.

?! Get this!

Calories are units of heat to show how much energy foods produce in the human body.

Words by Saskia Brits
Photographs by Gregg Segal



Taking a wrong turn with food choices

In a world where food should be fast and easy to cook, and words like 'processed' and 'sugar' appear all too often on ingredient lists, it is time that we rethink what food means to us.

Countries with the healthiest diets are countries where parents and grandparents still cook homemade meals for their families and those meals usually contain vegetables, fruits, nuts, legumes and grains.

Countries, like the United States, have alarming obesity rates and health problems caused by poor diets loaded with what is called 'empty calories', which are foods that typically cause us to gain weight because their main ingredients are sugars, fats and oils. Segal explains that in the United States nearly 60% of the calories in the foods that they eat are processed, and only 1% come from vegetables.

Meet the kids:

Kawakanih (left) is 9 and lives with her tribe in the Xingu national park in Brazil. Her diet is very simple, consisting mostly of fish, which they catch with nets from the river, cassava, porridge, fruit and nuts.

Anchal (right) is 10 years old and lives in Mumbai, India. Her family doesn't have a lot of money, but her mother manages to buy fresh vegetables and make homemade curry, lentils and roti.



Get this!

A current food trend in SA is going back to basics. Chefs also keep vegetable and herb gardens to get farm-to-table ingredients by simply stepping out of the kitchen door. Locals are catching on as you find a neighbourhood or farmer's market around every second corner where home-made food and drink and fresh produce are what's on offer. Don't forget to support your local market!



SA's got the munchies

Closer to home, South Africa isn't very different from the United States when it comes to eating habits.

We have two problems:

1) A staggering 40% of the population, usually in rural areas and/or informal settlements, lives on a diet that does not contain all the vitamins and minerals that our bodies need to stay healthy.

2) In the cities, we like to eat lots of everything, and a lot of the foods we eat are high in fat and sugar, which cause obesity and health problems.



Get this!

Insects are super-efficient food sources! We can eat 80% of a cricket, but only 55% of a pig and 40% of a cow are edible.

Be wise about what you eat

It is most important to be aware of what you eat and to know which foods are good for you and which foods are harmful. If your family takes time to cook a wholesome meal, sit at a table and appreciate the food on your plates, it shows a culture that celebrates food as a life-giving source that should be appreciated and enjoyed without being abused.

Know your stuff when it comes to healthy and unhealthy food. Keep your own food diary for a week or two to become aware of what you eat.

Ask your parents and grandparents to incorporate healthier foods into your diet. Encourage your family and friends to opt for healthier diets too.

Meet the kids:

Yusuf (left) is 9 years old and lives in Mirdif, Dubai. Yusuf's mom is a pastry chef and chocolatier from Ireland and he loves her cooking, but he also likes making his own scrambled eggs and toast.

Rosalie (right) is 10 and lives in Nice, France. Her father is a restaurateur and has taught her to make crêpes, salads and lentils with sausage, which is her favourite dish. She also eats lots of fresh fish, like sardines.



?! Get this!

When food is processed, it means that it actually goes through a process of changing it from its natural state into something else. Often processing foods cause them to lose valuable vitamins and minerals. The rule of thumb is, the closer foods are to their natural state, the better they are for you!

Let's change South Africa's dietary downward spiral and pave the way to healthier food habits.

Yum!

Shredding it

with SA skateboarding pro Brandon Valjalo

Skateboarding is officially an Olympic sport and will be at the 2020 Summer Olympics in Tokyo, Japan. As winner of two South African Championships and the World Youth Championship, pro skateboarder Brandon Valjalo proved that he is ready to represent SA in the Olympic Games. We asked Brandon to give us the low-down on his career and skateboarding as a sport.

The essentials

What essentials do you need in your kit to start skateboarding?

Skateboarding is an extreme sport, so you need a helmet and protective pads. Invest in a good pair of skate shoes as well as a good board which is made up of various parts, namely a deck, grip tape, trucks, wheels, bearings and hardware to keep it all together. Rather purchase a quality board to start out so you have the best equipment to progress faster.

The rules

What are the rules of this sport?

The most important rule is to have FUN! Skateboarding is all about freedom and expression. You can skate anyway you want which almost makes it like art. Then all you have left to do is try. You get scored by a panel of judges and the scores determine the winners and rankings.





Time to put in

How many hours a day do you practice?

Some days I would go to the skatepark and practise my contest tricks and work on my consistency which would take around six to seven hours. There are also days that I focus on practising new tricks that I can use in my contest runs to impress the judges. I realised that it is important to also have days where I just focus on having fun and allow myself to get creative.



Time to go pro

How long did it take you to become a pro?

I first got on a board around the age of three. It wasn't until I was about nine that I started skating every single day and would watch YouTube videos then go outside and practise the tricks on the street outside my house. I started skating pro contests when I was 17, but I only officially became a pro skateboarder at 21.

B Brandon's tips

Keep on pushing your limits, stay focused and don't be scared to get out of your comfort zone, work hard, have fun, stay motivated and never give up.



How to go pro

Brandon says:

- Practise in skateparks.
- Practise in the streets, where the terrain is not designed for skating.
- Get footage of yourself skating.
- Build your 'street cred'.



Stay on the lookout for this rising skateboarding star. Let's hold thumbs to see Brandon at the Olympic Games in 2020!

Valjalo

R. GOSCINNY **Asterix** A. UDERZO

Asterix and the CHIEFTAIN'S daughter

Written by Jean Yves FERRI

Illustrated by Didier CONRAD



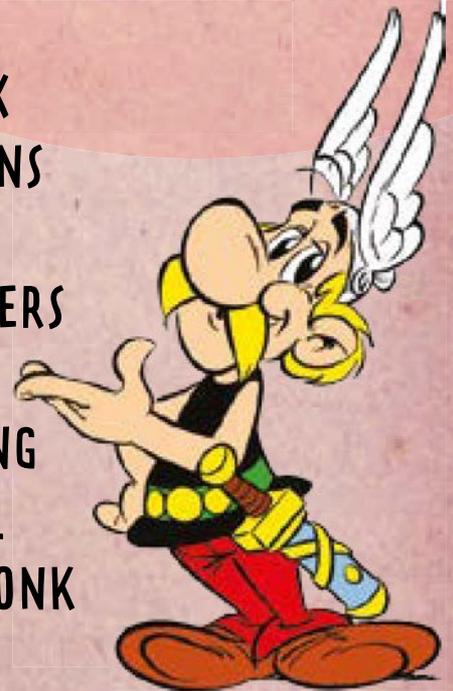
WHEN ADRENALIN, the rebellious daughter of the great Gaulish chieftain Vercingétorix, arrives at their village, Asterix and Obelix are tasked with protecting her from the Romans chasing her. This is easier said than done though, as Adrenalin is desperate to escape! Follow our favourite heroes as they try to reach Adrenalin before the Romans do. With trademark jokes and chaotic fight scenes, the latest instalment in this best-selling series is sure to entertain new and old fans alike.

Can you find all the words?

OUT NOW!

G	L	K	F	P	D	R	U	I	D
M	W	O	E	E	S	I	Q	K	O
I	M	B	N	A	T	E	E	S	U
S	K	E	R	P	L	O	N	K	C
S	N	L	R	L	Y	B	S	E	B
I	R	I	N	V	A	D	E	R	S
N	U	X	O	E	E	A	L	L	C
G	O	A	N	S	D	G	D	E	R
F	U	E	R	O	M	A	N	S	O
L	C	M	T	C	S	U	E	R	L
I	H	E	S	H	A	L	T	I	L

OBELIX
ROMANS
GAUL
INVADERS
DRUID
MISSING
SCROLL
KERPLONK
HALT
OUCH



Available at all good bookstores **NOW**

 **PAN MACMILLAN**

 Pan Macmillan Kids & YA and  @PanMacmillanSAkids



**Tokyo
2020**

In the build-up to the Tokyo 2020 Games, artists have created artworks for posters based on the theme of the Olympic or Paralympic Games. Collect all six posters in volume 9 of SN.



Hirohiko Araki The Sky above The Great Wave off the Coast of Kanagawa
© 2020 TOKYO 2020



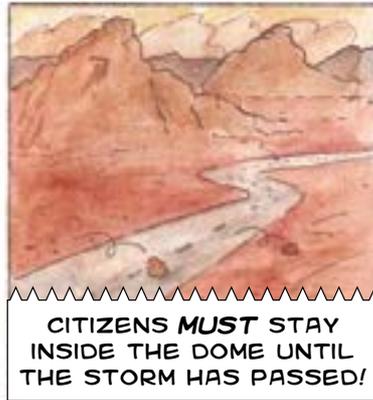
"I imagined the gods of sports descending on Japan from a sky filled with clouds resembling turbulent waves."

Hirohiko Araki (Manga Artist)



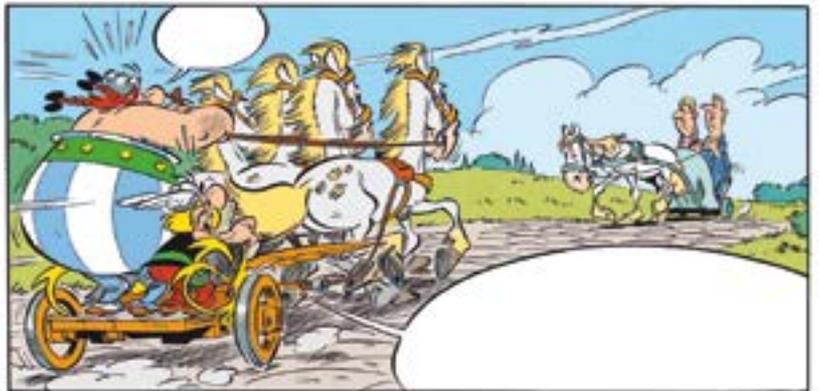
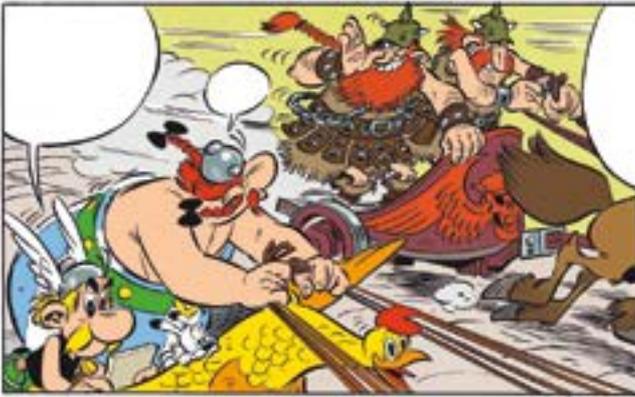
Story and artwork
Maya LeMaitre

MIMI'S LIFE ON MARS



Asterix[®]

Asterix and the Chariot Race: Fill in the speech bubbles in this page from Asterix and the Chariot Race to create your own exciting story



It's easy to

Subscribe

online at

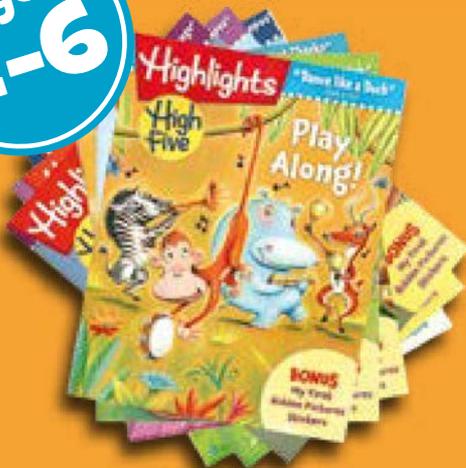
kidsmag.co.za

Ages
8-15



Supernova

Ages
2-6



Highlights
High Five™

Ages
6-12



Highlights™