

Made  
in **RSA!** 

# supernova

The mag for curious kids



Vol  
11.5



**BK**  
PUBLISHING

What do you  
know about  
**Hyenas?**

PUZZLES | SCIENCE | NATURE | ACTIVITIES | SPORTS | COMICS

THIS IS A NEVER-BEFORE-SEEN EPISODE FROM THE MIMI'S LIFE ON MARS COMIC BOOK!



SCAN HERE



GET YOUR COPY NOW



TINA IS REALLY INTO SCIENCE. SHE WEARS OVERALLS BECAUSE SHE LIKES TO RUN AROUND AND GET HER CLOTHES DIRTY.



ON THE OUTSIDE SHE SEEMS TOUGH, BUT SHE REALLY CARES ABOUT HER FRIENDS AND FAMILY, AS WELL AS ANIMALS AND NATURE.



SHIREEN SEEMS SHY AT FIRST, BUT REALLY SHE'S CONFIDENT AND STRONG. SHE LIKES FASHION AND EVEN WEARS MAKEUP SOMETIMES.



SHE'S OBSESSED WITH BOOKS AND WANTS TO BE A WRITER WHEN SHE GROWS UP.



I'M SOMEWHERE IN THE MIDDLE. I'M KIND OF GIRLY, BUT NOT REALLY. I LIKE TO MAKE PEOPLE LAUGH. I LIKE TO ACT AND DRAW PICTURES.



MAYBE I SHOULD ALSO WEAR MAKE-UP. THEN AGAIN, MOM ONCE MADE ME DRESS UP FOR A FAMILY DINNER AND I HATED IT!





# rage expo

explore

awesome

connect

**Video Games**

**Geek Culture**

**Technology**

**Computers**

**Esports**

**Cosplay**

**Shopping**

**Competitions**

**GET YOUR  
TICKETS NOW!**

8 - 10 DECEMBER

GALLAGHER CONVENTION CENTRE

**WWW.RAGEEXPO.CO.ZA**

# Hi SuperKids



**Candice**

Welcome to the spotted brown hyena issue of *Supernova* magazine! We have featured quite a few carnivores in the pages of this magazine over the years, but I have to say that I think there is something quite special about hyenas.

What stood out to me about hyenas is that they are strong. Super strong! Their teeth can crunch through bones, and their stomach acids are so tough that they can practically eat anything and leave just the horns of their prey behind after a meal. But even though hyenas are super tough, they rely on their pack – and they stick together.

Sure, a single hyena can survive on its own, find its own food and fight its own battles. But together, a pack of hyenas is an unstoppable force. Even lions come to fear them!

I think we can learn a lot about the importance of *our* 'pack' from hyenas – the friends and family we surround ourselves with. The people in your pack make you stronger, more capable and resilient, and you will fight battles together, work as a team and depend on each other. So don't be afraid to rely on your friends and family, and let them rely on you too. A pack is always stronger together.

Happy reading and stay curious, kids!

## Chanel's top picks in this issue!

Did you know that comets are like giant icy rocks that float around in space? It's amazing to think about how huge the universe is.

I'm excited to share some cool facts about comets in this issue! I had so much fun writing this **Life, Universe and Everything** (page 18)!



What a jam-packed, awesome issue of *Supernova*! Definitely one of our team's favourite issues so far!



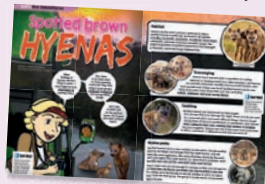
**Chanel**  
Writer and content creator



Hey guys! These are my absolute top picks that you **HAVE** to check out in this new issue!

I was super excited to work on this issue because it was all about spotted hyenas, which are my absolute favourite animals!

Learning about the incredible spotted hyena in **Ant's Eco Adventure** (page 24) was so much fun! Did you know that their hearts are twice as big as a lion's? Isn't that amazing?



Cows can be so fun and playful! Check out this amazing **PhotoFeed** (page 20) of different types of cows from all around the world! There's lots to learn about these mighty moo-ers!



# The Regulars

## The Pinboard

By you. For you.

4

## The History of...

Keys

12

## Tech Talk

AI Art

13

## The Pro-Files

Choreographer

14

## Trends

Being yourself

15

## Andy's Atlas

Patagonia

16

## Life, the Universe and Everything

18

## Photo Feed

Mighty Mooers

20

## Get Active

Rock balancing

38

## Brain Games

Super Safari

40

## Convos with Candice

How do I finish what I start?

43

# The Features

## 24 Spotted brown hyenas

You might think you know all there is to know about hyenas if you've ever spotted one in the bush or heard its laugh echoing through the night. But there is so much to learn about these interesting pack animals that can chew through bone, run further and with more stamina than a lion, and eat one third of their body weight in a single meal. Let's learn more about these intriguing creatures together!



## 29 Make a hyena mask



Hyenas are well camouflaged in the bush because of their thick, spotted coats. But, their pack also protects them! Gather all your friends, and get ready to start your own hyena pack with these super cool recyclable masks!

## How we see colour 34

Colours play a very important part of our everyday lives. Not only do they make things more beautiful, but they tell us more about the world around us. But how do our eyes actually see colour? And how do animals see colour compared to us humans?



## South African Heroes

30

Throughout history, South Africans have always taken the world by storm! Whether it was changing the world of medicine or influencing change in an entire nation, South Africans are every bit as inspirational as the rest of the world. Get ready to learn more about these awesome South African figures that you may (or may not!) have heard of.



Answer for Brain Games, page 40:

Let's go on a game drive!

Answers for What'cha Reading, page 41:

1. True - False - False - True
2. retina - optic - photoreceptors - cone

## Ask Jules?



Alexon (9)  
from Alberton asked us:

## How do crabs communicate?

### Jules

Crabs have claws at the end of their two front legs called pincers. These act like a tool for grabbing and lifting things! Crabs use their pincers for fighting, for catching prey and tearing it apart, and for digging burrows. Their pincers are super strong, with some crabs being able to pinch at a force of 1765 Newtons (while a human can only bite at 340 Newtons!). Their other legs are used to walk forward, backward, and even sideways! Some crabs can even swim backwards and sideways.

Crabs also use their pincers to communicate with each other, by making drumming, clicking or flapping sounds! This is called stridulation – basically making sounds by rubbing certain body parts together. Some insects, like grasshoppers and crickets, do this by rubbing their legs together.

Some crab species naturally shed their claws, which grow back after about a year.

# The Darvaza gas crater

**In the middle of the desert in Turkmenistan, a country located in Central Asia, you'll find the continuously burning Darvaza Gas Crater!**

The crater was found during a drilling mishap in 1971 when a drilling rig struck a natural gas reservoir and the earth around it collapsed. It was decided to light the gas on fire to burn it out and stop any toxic gases from spreading. But to everyone's surprise, the crater is still burning!

Now, the crater is 20m deep and 70m wide, and it attracts a lot of tourists! The president of Russia announced in January 2022 that they are trying to extinguish the endless fire as soon as possible, and that their best scientist is working on it.



# Eskom Expo Young Scientists

At the 2023 Eskom Expo conference, 330 young scientists from Ghana, India, Kenya, Lesotho, Mexico, Mozambique, Namibia, Zimbabwe, Indonesia, Turkey and South Africa gathered to present their innovative projects to a panel of judges and industry experts! Awards were given for the *Best Female*, *Best Development Project*, *Best Innovation Project* and *Best Energy Project* at the expo! What an awesome way to celebrate the new, bright young minds of our generation.



## Creature FEATURE

Puffins are nicknamed 'sea parrots', and spend most of their lives out at sea! When they are not swimming, they rest on the ocean waves, usually close to Norway, Iceland, Britain and Ireland. They are also fabulous flyers, and flap their wings up to 400 times a minute! They are also great at swimming, and use their webbed feet to dive for their favourite fish.

During the year, a puffin's beak (or bill) changes colour. In the winter, their beaks are dull grey, but in the spring it changes to a bright orange that helps them attract their mates.

In the spring and summer, they gather in colonies on the coasts and islands of the North Atlantic Ocean to breed. Usually, they pair up with the same partner – some mates have been together for 20 years! Puffins lay just one egg per year, and the parents take turns incubating the egg and caring for the chick.

Although they are not an endangered species, their population is in decline due to food shortages (from overfishing) and ocean pollution, especially oil spills.

Photo: Wynand van Poortvliet



Photo: Hans-Jürgen Mager

## Did you know?

Koalas sleep  
for 22 hours  
per day



# CHOC KIDS CORNER

CHOC has many awesome supporters who help them achieve their goal of making the lives of those living with childhood cancer a little brighter. One of these awesome supporters are THE COWS!



The Cows are a group of people on a mission to make a difference to children with cancer and their families! The Cows use their lifestyle goals, like swimming, cycling, running, canoeing, and climbing, to raise money for the CHOC Childhood Cancer Foundation SA.

We love  
having fun  
for a good  
cause!



# Danica's Book Review

JonathanBallPublishers

Danica (12) read  
*'The Stories Grandma  
Forgot'* by Nadine  
Aisha Jassat. Here's  
what she thought:

This book was so sweet and gripping from the start, and it showed so much love between family and friends. As a person who doesn't read poetry often, I thought this book was absolutely amazing. If you are one for riddles and mysteries, this book is definitely for you. I loved going along with Nyla and seeing her unfold the mysteries about her past. I adored the plot twists and how they never let you know what to expect. This was an amazing book, and I would definitely recommend it.



## Did you know?

A group  
of parrots  
is known as  
a pandemonium.





From **BEDROOM**  
**COMPOSER**  
to **ROCK STAR**

Unleash the  
**MUSIC**  
in you!

**LEARN  
A NEW  
INSTRUMENT**

Pop in to our store  
and chat to our  
awesome music  
experts!

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

Call us: 012 991 4930

Visit us: Six Fountains Lifestyle Centre, Pretoria

**KAWAI**  
THE FUTURE OF THE PIANO

*tj*  
**Trevor James**

*Pearl*  
The best reason to play drums.

**Ibanez**

**PRS** PAUL REED SMITH  
GUITARS

**KORG**





**Scream**

Photo by Sergey Sawi

Black and white ruffed lemurs, like all lemur species, are only found in the rainforests of Madagascar. While there are nearly 100 different types of lemurs, only 2 species are ruffed – the black and white species, and the red species. These lemurs have the second loudest call of all primates, beaten only by the howler monkey, and have 12 different calls! They are one of the biggest primates in Madagascar. They are also excellent at spreading pollen, like bees! These lemurs love eating nectar from flowers, and leftover pollen stuck on their facial fur is transported to other trees and plants.

This photograph of an ultra shocked black and white ruffed lemur is a finalist in the 2023 Comedy Wildlife Photography competition.

# Bach

The musical genius who went to prison!

Johann Sebastian Bach was born on the 31<sup>st</sup> of March, 1685 in the German town of Eisenach.

His father, also named Johann, was a 7<sup>th</sup> generation musician! He carried on the family tradition by teaching Johann how to play the violin.

When he was 10, both of his parents passed away. Johann went to live with his oldest brother, who taught him how to play the organ.

Johann sang in a boys' choir at his school in Lüneburg. He was even granted a scholarship for his fine voice!

By the time he left school, Johann was a skilled organist and composer. He worked as a musician in a few churches, as well as for some German noblemen in different cities.

His first major position was as the official organist for a duke at Weimar. Later, he also became director of the duke's orchestra. His duties included composing a sacred cantata — a type of music for church services — every month.

In 1717, Johann accepted a job as the musical director to Prince Leopold of Köthen.

His boss at the time, the Duke Wilhelm, refused to accept his resignation and sent him to prison for a month!

He married twice and had 20 children, five of which became musicians themselves.

By 1740, Johann was struggling with his eyesight, but he continued to work despite his vision problems.

In 1749, he tried to fix his eyesight by having surgery. But, the operation ended up leaving him completely blind. A year later, he died from a stroke.

During his career, Johann composed over 1 000 different works of musical art.

While he was alive, he was better known as a organist than a composer.

After his death, Johann's compositions were mostly forgotten until the early 1800s. Then, people began to rediscover his works!

Today, his music is highly celebrated and performed often.

# WEDDING TRADITIONS AROUND THE WORLD

Weddings are the start of a couple's journey together and are usually celebrated with age-old traditions. Some release doves or throw rice, but other wedding traditions around the world take celebrating love to a whole new level!

Illustrations by Alexandra Botha-Green



In Germany, newlywed couples take part in an old tradition called *Baumstamm Sägen* – cutting a log in half with saws! Sawing the log together is a symbol for the challenges that each couple will face and overcome in their marriage.



Don't be shocked if you see a Kenyan father spitting on his daughter's wedding dress! In Kenya, this is a sign of respect, and is done in good faith in order not to jinx the marriage. Spit-tacular!

Theft is no joke... except when it is, of course! In India, the groom must take off his shoes before sitting for the pheras (vows). This ritual is carried out at traditional Hindu weddings. During these vows, the bridesmaids and cousins are free to steal the groom's shoes! The only way for the groom to get his shoes back is to bribe the 'thieves' with cash.



# The History of Keys



Words and layout by Elaine Carr

**Keys have changed a lot over time. First, we used them to unlock doors, drawers or chests. Now, keys are used to start cars, and we even use a form of 'key' to unlock our phones or swipe our credit cards! Have you ever wondered where these handy inventions came from? Well, key-p calm and let's explore the history of keys together!**

## The origin of the key

The oldest recorded keys are estimated to be 6 000 years old! These ancient keys were first used in Assyria, ancient Egypt and Babylon. Keys today are widely made from metal, but the first keys (and even locks) were made out of wood! This isn't the best material to use for the mechanism that safeguards your valuable items... However, the first keys were designed so well, that most keys we use today are very similar to this design!



### ?! Get this!

Married Viking women were responsible for keeping the family's keys, and many women sewed their keys to their dresses as a status symbol!

## Key-ping up with the times

Initial key designs worked very well until people figured out how to pick locks! Locksmiths in the 19th century struggled to find ways to keep people from picking locks – which is why new key designs were essential in those times. All keys were made to be unique until 1917 when duplicate keys were invented! A wheel was used to cut keys into the same shape as the original.



### ?! Get this!

In medieval towns, people chose a special guard that would keep all of the townspeople's house keys!



## Under lock and key

We have definitely come a long way since the invention of the first keys! Today, we use all kinds of new keys like digital keys, pincodes and even facial and fingerprint scanning. Fort Knox is one of the most secure buildings in the world. To prevent theft and protect the USA's gold reserves kept there, employees working in the building must enter codes that constantly change at the locked front door!



### ?! Get this!

The first combination lock was invented in 1857 by James Sargent, an American locksmith.



# AI ART

Words by Chanel Roux

*In the world of Artificial Intelligence, creativity goes hand-in-hand with technology! Now, AI is taking the world by storm, including the art world. Some artists embrace using AI in art, and others are not so sure about its originality. Let's dive into the wonderful world of AI art and take a look!*

## What is AI Art?

Artificial Intelligence art is digital artwork made using special computer programs. AI art is created by typing in a text prompt. Then, the computer uses its smart algorithms to make a unique artwork. It's like magic!

## Why is it popular?

AI art generation has become a popular tool for artists, helping them create artwork faster. But it has also caused some problems. Relying too much on AI might make art less unique and creative. On the other hand, AI art can still be valuable and innovative, and give artists a new way to express themselves creatively.

## How does it work?

Using an AI tool or generator, an artist can type a simple idea into a computer to create a digital artwork! Special features can be added to the painting to make it even more unique by prompting the AI to use certain colours, styles, lighting and textures.

### ?! Get this!

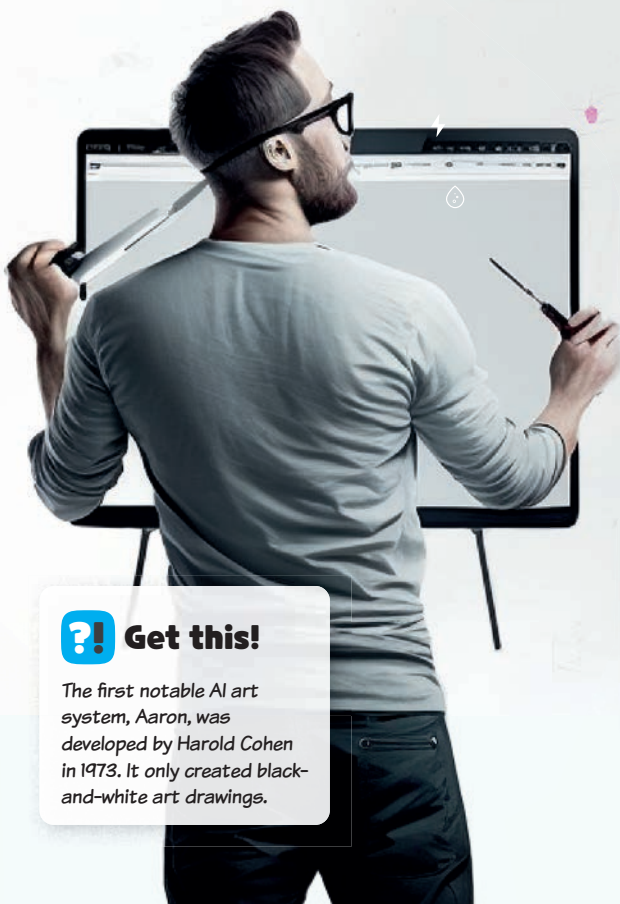
Artificial Intelligence is the ability for a program or device to perform tasks that are normally done by humans.

### ?! Get this!

AI art can be made of bits of artwork from different artists all over the world. This could be a big problem when it comes to copyright laws, and giving credit to all of the artists!

### ?! Get this!

The first notable AI art system, Aaron, was developed by Harold Cohen in 1973. It only created black-and-white art drawings.



# Choreographer



Hi, I'm Bianca!

*I am a professional freelance dancer, performing artist, and choreographer! I am also a writer and yoga teacher when I am not on stage or in the studio.*

## What is a choreographer?

I create dance movements, sequences, and routines for artistic presentations. I work closely with dancers, music directors, costume designers, lighting designers, and other artistic professionals to bring to life a vision for a dance performance!

## What is a typical day like for you?

Every day is very different depending on what project or production I am working on. Some days we rehearse for 8 hours in the studio, and other days I work on my laptop doing admin, marketing, design, and mixing and editing music and film. Once the production opens, our evenings are all about performing.

## What is the best part of your job?

I love being able to express myself creatively every day and being involved in bringing the magic of art to life! I am always learning and exploring, and get to collaborate with lots of inspiring people. Being backstage or on set is also fascinating as you see all of the hard work that goes into putting on a production!



## Do you need qualifications to do your job?

No, but training is very important! Most choreographers have training in many different styles of dancing from a very young age. Studying Performing Arts or Choreography at a university or training institute can help you meet possible employers and prepare you for the professional world.



## What are some challenges in your job?

This job needs a lot of dedication and perseverance! You spend long hours putting your body through lots of tiring, physical movements. You also never really stop working, as you are always on the lookout for the next opportunity. As an artist, people may not always take your career seriously, and creating work for little in return can feel exhausting.

### **B** Bianca's advice

*Find what makes you unique and use that to your advantage! Be prepared to never stop learning new skills and new ways of doing things.*

# Being yourself

## and the power of positivity

Words by Elaine Carr

*Ever heard that you should be yourself because everyone else is already taken? Being yourself can seem like a scary challenge, but it is actually the best thing you can do for yourself. Being yourself has become the trendiest thing you can do – Be-YOU-tiful!*



There are many reasons why it is important to be yourself: to help you be confident, to trust yourself, to enjoy life, and to stick to your own values. When you are being true to yourself, life becomes more enjoyable and the people around you can relate to you! Being yourself also makes you happy, and that's the most important thing.

Some things you can do to feel more like yourself:

- Do your favourite activities
- Wear your favourite clothes
- Listen to your favourite music
- Say what is on your mind
- Express your emotions
- Do what you love
- Show your unique talents and personality
- Embrace your physical characteristics
- Acknowledge your thoughts and emotions
- Be grateful for who you are
- Focus on positive thinking
- Spend time outside



### ?! Get this!

Being yourself means you like who you are and live your life the way you want to live it!

# Patagonia

## Where Argentina meets Chile



Patagonia

Words by Andrea Vermaak

I can't believe  
I've waited this long to  
visit Patagonia. Its diverse  
landscape is simply  
breath-taking!

My  
local guide  
answered all  
my questions  
and told me so  
many interesting  
facts.



# Is Patagonia a country?

Patagonia is not a country. Yes, you read that right! Patagonia is the southern-most geographical region of South America. The region is shared between two countries, Chile and Argentina.

## Why 'Patagonia'?

The region was named after the indigenous people, whom Ferdinand Magellan called Patagons. Magellan was a Portuguese sailor, who first commanded a Spanish expedition in 1519. Magellan claimed that the Patagons were twice the size of an average man!

In 1767, a French explorer called Louis de Bougainville discovered that the stories of giants in Patagonia, that were believed in Europe for over 200 years, were myths. The Patagons, who are now believed to have been the Tehuelche tribe, were only about 1.8m tall. The average European at the time was about 1.5m tall.



Photo by Baptiste Azais

Patagonia has a vastly diverse landscape. The Andes Mountains, lakes, temperate (mild climate) rainforests, fjords and glaciers are found in western Patagonia. To the east, you can visit deserts, plateaus and grasslands.



Photo by Ekaterina Pokrovsky

Patagonia has some awesome unique wildlife, with over 500 animal species to enjoy. These furry llama-like animals are called guanacos – the wild relatives of alpacas! They are hardcore survival experts that easily brave the subzero temperatures of Patagonia.



Photo by Maxi Dorado

You'll find the Perito Moreno Glacier in Los Glaciares National Park in southwest Argentina. It's about 74m above Argentino Lake. It's total depth below water is about 170m! While many of the world's glaciers are melting, this glacier is one of few that still grows as much as it melts.

## Home of the biggest dino

So far, the Argentinosaurus is thought to be the biggest known dinosaurs that ever lived. Guillermo Heredia discovered its fossils on his farm in 1987. Only fragments have been found so far, but the dino is estimated to have been 30 to 35m from head to tail. It's believed to have weighed 65 to 85 tonnes! There's still a lot of debate about its size because of lack of evidence, but there's no doubt that it was a massive dinosaur!

# Comets

## THE SECRETS OF COSMIC SNOWBALLS

Words by Chanel Roux

& Candice Robertson

Illustrations by Benoît Knox

### Comets are made of WHAT?!

Did you know? A comet is basically just a chunk of dust and ice that orbits, or travels around, the sun. You could say it's almost like a 'dirty snowball'. There are billions of comets in the solar system, but most never pass close by Earth. So the ones that do are a sight to see!

#### ?! Get this!

Each comet has a tiny frozen part, called a nucleus, that is often no larger than a few kilometers across.

### Is it a bird? Is it a plane?

Nope, that fiery blaze falling across the sky is a comet! While they are beautiful to watch and definitely inspiring to study, for much of human history, comets were not welcome visitors. They were thought to symbolize times of disaster and doom!

### Fiery rocks of ice and dust

The frozen materials in a comet can be as big as a town when they are not heated up! As a comet gets closer to the Sun, it warms up and releases the dust and gases. This creates a huge glowing head that is even bigger than some planets. The dust and gases then form a long tail that stretches for millions of kilometres away from the Sun.

### From comet to asteroid

When comets travel close to the Sun, the ice inside them melts. This process repeats many times as they travel around the Sun. After a few laps, the comet runs out of ice and all that is left is a large rock. At that point, the comet is no longer a comet and is now an asteroid or a meteoroid! Rock on!

Comets continue to capture the imagination of scientists and stargazers alike with their beautiful light displays. Let's take a closer look at these mysterious flaming snowballs in the sky!

### We owe a lot to comets...

Comets are an important part of the Solar system. Some scientists believe that comets and asteroids are the reason why we have water on Earth! Since comets contain ice, which becomes water when melted, scientists think that around 10% of Earth's water could have come from a comet.

## Hanging out with Halley's Comet

Like planets, some comets orbit the sun on a predictable schedule. Halley's Comet, the most famous of these weird wanderers, drops by to visit Earth every 75 years or so. It's not due for its next visit until July 2061.

IF YOU'RE  
12 YEARS OLD  
IN 2023, I'LL  
SEE YOU WHEN  
YOU'RE 50.

## Easy comet, easy go

Comets travel around the Sun just like planets. The path they follow is called their orbit.

Short period comets have orbits of less than two hundred years. Some have very short orbits of just a few years. These types of comets originate from the **Kuiper belt**.

Long period comets have orbits of greater than two hundred years. Some long period comets have orbits of thousands of years! Scientists think that long period comets come from the **Oort cloud**.

### ?! Get this!

A great comet is one which is bright enough to be seen from Earth without the need for a telescope. Approximately one great comet happens every 10 years!

## Nothing shines brighter than Hale-Bopp

Hale-Bopp was a bright comet that could be seen in the sky without a telescope. It was so bright that it was even brighter than most stars! It had a long tail that stretched across the sky. People could see it for several months before it disappeared.

# MIGHTY MOOERS

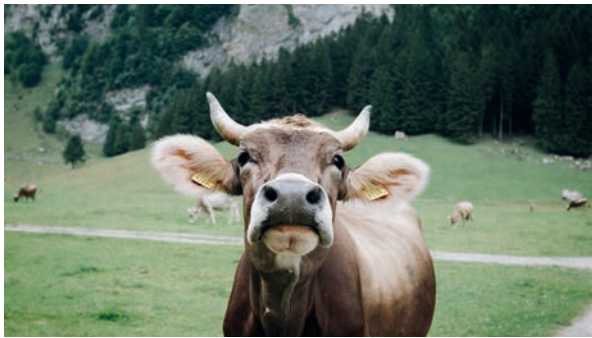


**German black pied cow, Rheinfelden (Germany)**  
**Photo by Kristyn Lapp**

These adorable cows are instantly recognizable by their black and white coats! They are known for their friendly and gentle nature, making them great companions for farmers and children. Their milk is delicious and is used to make dairy products like cheese and butter! Each dairy cow produces about 25-30 litres of milk every day and is milked 2-3 times per day.



**Brown Swiss cow, Switzerland**  
Photo by Claudio Schwarz



These silly cows have playful personalities and make everyone laugh with their goofy antics, whether they're chasing their tails or playing hide-and-seek behind haystacks. [#MemorableMoo-ments](#) [#UdderlyHilarious](#) [#MoovesLikeJagger](#)



**Brahman cow, Africa**  
Photo by Pieter van Noorden



Originally from India, this breed of cow have a distinctive hump on their back and large, floppy ears. They adapt to hot climates and can withstand extreme temperatures, and their thick skin is resistant to insects. [#Can'tBugThis](#) [#TheseHumpsDon'tLie](#)



**Jersey cattle, United Kingdom**  
Photo by Luke Stackpoole



With their beautiful brown coats and gentle nature, these cows produce some of the richest and creamiest milk – perfect for delicious ice cream and cheese! [#MilkshakeMakers](#)



**Highland cow, Scotland**  
Photo by Pascal van de Vendel



These gentle giants are not only adorable, but they're also very strong! They spend most of their time grazing in the beautiful Scottish Highlands. [#MoovinAndGroovin](#) [#HayThere](#)



**Wild black yak, Austria**  
Photo by Lieve Ransijn



These yaks are known for their incredible strength and ability to survive in harsh environments. With thick, shaggy coats and majestic horns, they are true mountain warriors. [#YakAttack](#)



**Belgian Blue cow, Belgium**  
Photo by Alina Rosanova



These cows get their name from their beautiful blue-gray coat. They are super strong and muscular, but also gentle and friendly. [#BeefyBlueBabe](#) [#MuscleMoo](#) [#Bull-Dozer](#)





## Nile crocodile

Photo by Jean Wimmerlin

This Nile crocodile was spotted on the banks of a river in the Kruger National Park. Looking at its pearly white teeth, it's not hard to believe that crocodiles have the strongest bite in the animal kingdom! Their bite can exert a force that is eight times more powerful than the bite of a great white shark! Even so, crocodiles have one of the most caring natures as animal parents. While most reptiles lay their eggs and move on, Nile crocs guard their nests until the eggs hatch, and will often roll the eggs gently in their mouths to help the babies hatch! Keep an eye out for more interesting facts about these cool creatures in our next issue!

# Spotted brown HYENAS

Words by Candice Robertson

Illustrations by Vicki Venter & Benoît Knox

When thinking of hyenas, the first thing to come to mind might be their scavenging or cackling cries...

But, there is so much more to these amazing creatures! They have unique social groups, advanced intelligence and strong family bonds.

Let's take a closer look at the spotted hyena, the largest and most common hyena.

## ?! Get this!

Hyenas may look like dogs, but they are more closely related to cats, mongooses, meerkats and other cat-like mammals.

## Habitat

Hyenas are the most common carnivores in Africa. Spotted hyenas in particular are found in all habitats, including savannahs, grasslands, woodlands, forest edges, subdeserts, and even some low mountain ranges. The largest population of spotted hyenas live in the Serengeti in Tanzania, and in the Kruger National Park.



A group of hyenas is also known as a cackle or clan. Each group can have as many as 80 hyenas!



## Scavenging

Hyenas have earned quite a reputation for eating leftovers or stealing meals from other predators. But hyenas are actually extremely versatile and successful hunters, and hunt and kill most of their own food! Spotted hyenas packs can bring down prey many times their own size, including buffalo, wildebeest, and even young hippos.

### ?! Get this!

There are four species of hyena: brown, spotted, striped, and the smaller and lesser-known aardwolf.

## Cackling

Spotted hyenas are well known for their laughs and whoops that echo through the night. These sounds are used for communication and mean different things. Hyenas 'laugh' during times of nervous excitement or submission, and 'whoop' when calling for their cubs, marking their territory or bringing the pack together. Hyenas are one of the most vocal mammals in Africa, and have 11 different sounds that we know of!



## Hyena packs

Spotted hyenas have a very complex social system. Female spotted hyenas are bigger and stronger than the male hyenas, and are typically more aggressive. This means that they dominate the pack and rank higher than male hyenas. So, when food is available, adult females and cubs eat first, and adult males must eat last.

Once male cubs are old enough to manage on their own (at age two or three) they are thrown out of their clan and must find a new one. It's entirely up to the females to decide whether or not to accept a new male into their group. The group is usually led by one powerful alpha female.



# Adaptations and Anatomy

Spotted hyenas have an unusual appearance with uneven legs, a long powerful neck, a short upright mane, and short thick fur that is covered in spots. Their amazing hearing, sharp eyesight and ability to run for long distances without getting tired make them strong contenders for one of the fiercest predators on the African plains.

## Mane

Hyenas' manes make them appear large and more intimidating to predators or rivals. It also protects the hyena's neck from injuries during fights, and keeps them cool in hot weather.



## Ears

Spotted hyenas have rounded ears, which make them easy to identify from brown or striped hyenas. Their good hearing allows them to hear noises coming from predators killing prey or feeding 10km away.



## ?! Get this!

Hyenas have good night vision and hearing, making it easier for them to hunt at night or listen for predators.

## ?! Get this!

Spotted hyenas are the only hyena species with a mane, making them easy to identify!

## ?! Get this!

A spotted hyena mother's milk has the highest protein of any land carnivore.

## Hyena pups

Hyenas give birth to 1-3 small black pups (or cubs) a year. They are born in underground dens dug by their mother. The cubs are born with their eyes open, teeth intact and muscles ready to go. After 3 weeks, their black coat starts to lighten, and their spots appear.



## Head and neck

The head, powerful jaw, and neck have strong muscles to crush and tear meat. Their strong necks allow them to break up and carry their prey, and helps give them strength for their strong bite force.

### ?! Get this!

A hyena's heart is twice the size of a lion's, which allows them to run for long periods of time while chasing their prey.

## Mouth, jaw & teeth

Hyenas have super sharp teeth and strong jaws. In fact, the spotted hyena has one of the strongest jaws in the entire animal kingdom! This helps them chomp through every part of their prey, except the horns. Because of all of the calcium they eat, their poo is white.

### ?! Get this!

Hyenas can eat one-third of their body weight at one meal. That's around 18kg!

### ?! Get this!

Spotted hyenas can digest things that other animals cannot, like skin and bone. Special acids in their stomach break these down.



## Legs

Hyenas have strong and developed front legs that support their heavy necks and heads. Their front legs are also longer than their back legs, which allows them to run in a way that saves energy while travelling long distances searching for food. Their rounded rumps prevent attackers coming from behind getting a firm grip.





Photo: Diego Stahl

## Are hyenas vulnerable?

Spotted hyenas are not currently threatened, but the IUCN classifies them as vulnerable. However, this could change. Droughts have a drastic effect on the food chain, impacting the food available for herbivores to eat and therefore, the prey available for carnivores to hunt. They are also threatened by habitat destruction caused by human competition for space and food.

## Threats

Humans and lions are a hyena's only threat. Hyenas and lions inhabit the same areas, hunt the same prey, and scavenge the same remains of animals. Consequently, they steal food from each other, chase each other, and even kill each other's young.

Many cultures have superstitions about hyenas, relating to legends, folklore, witchcraft and the supernatural. They are often killed by humans for this reason or hunted for their body parts to be used in traditional medicine. They are also poisoned or killed for attacking domestic livestock, or when crossing roads.



Photo: Luc Stank



How cool are hyenas, right?

Like many other African carnivores, they are important for the health of hoofed animal populations by hunting the weak and sick.

This keeps an important balance between the herds and their food.



# Make a HYENA MASK



*Hyenas have special eyesight that helps them see clearly at night, and super strong jaws to bite and eat their prey. Their dark spots also help them camouflage in the long grass!*

## ?! Try this!

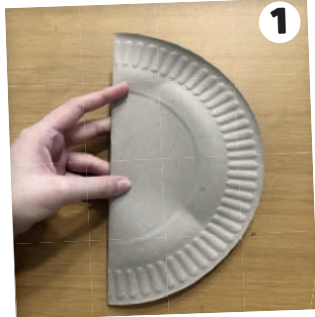
You can also use tape to stick the mask to a wooden stick. This makes it easy to hold the mask!

## What you need:

- Scissors
- Glue
- Tape
- A paper plate
- A marker
- Paper

## !! Warning

Ask an adult to help you with using the scissors.



1

Fold a paper plate in half.



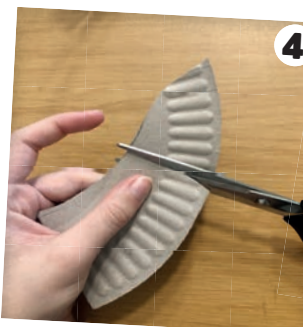
2

Draw a curved line on the lower half of the folded plate and cut along the line.



3

Draw two eyes. Cut them out from the outside of the plate.



4

Cut some ears and a mouth from the left-over paper plate.



5

Stick the ears and mouth on the mask using glue. Cut diagonal snips on the mouth of the mask.



6

Fold in the nose. Stick all the loose pieces of the mask closed with tape. Fold a wrinkle for your mask.



7

Decorate your mask with paper, paint or a marker.

# South African HEROES on the World Stage

Words by Sulé Potgieter  
Illustrations by Benoît Knox

Throughout history, South Africans have always taken the world by storm! Whether it was changing the world of medicine or influencing change in an entire nation, South Africans are every bit as inspirational as the rest of the world.

## Nelson Mandela

As South Africa's first black president, Nelson Mandela is a very important figure across the entire world! His anti-apartheid activism meant that he fought against the oppression of black people during apartheid. After being arrested and imprisoned for many years, Mandela was released and put an end to apartheid with the government. He improved the living standards of South Africa's black population and made South Africa a place where people of all races and colour could live together in peace.

## Desmond Tutu

Archbishop Desmond Tutu was one of South Africa's biggest human rights activists. He fought hard against apartheid, and in 1984 he received the Nobel Peace Prize. He was also the very first black person to lead the Anglican Church of Cape Town.

Desmond inspired and led thousands of people into a post-apartheid South Africa.

### ?! Get this!

Apartheid was a government system where races were divided and kept apart from each other.



## Chris Barnard

In 1967, Christiaan Barnard became the very first person in the world to successfully transplant a heart from one human to another. While his first patient only lived for 18 days after the transplant, Chris went on to do more operations where his patients lived for many years afterwards. His success had a massive impact on the world of medicine, and he has inspired many South Africans to follow in his footsteps!



### ?! Get this!

Mark Shuttleworth was the very first South African to travel to space.

## Johnny Clegg

Also known as the 'White Zulu', Johnny Clegg was a well-known musician who mixed Zulu into his music and performed with different races. He performed during the apartheid era when mixed-race bands were not allowed to perform in public. So, he could only perform in private venues! Johnny's music crossed the racial split and showed the world that people should come together instead of being divided.

A close-up portrait of Siya Kolisi, a Black man with short, dark, curly hair and a beard, smiling. He is wearing a green shirt. The background is a textured, painterly style with shades of green and blue.

## Siya Kolisi

Siya is the current, and very first black captain of South Africa's national rugby team, the Springboks. In 2019, he and his team went on to dominate and win the Rugby World Cup. He has been leading an unstoppable force for several years and has united the country in their support for the Springboks.

A portrait of Pretty Yende, a Black woman with long, dark, wavy hair, smiling broadly. She is wearing a pink and white patterned dress. The background is a textured, painterly style with shades of pink, red, and orange.

## Pretty Yende

Born in the small town of Piet Retief, opera singer Pretty Yende has been on some of the most important stages in the world! So far, her biggest performance took place when she was invited to sing at the coronation of King Charles III in May 2023. This makes her the very first solo African artist to perform at a British coronation!

A portrait of Trevor Noah, a Black man with short, dark, curly hair, looking slightly to the side. He is wearing a dark suit jacket over a light blue shirt and a light blue tie. The background is a textured, painterly style with shades of blue and white.

## Trevor Noah

World-famous comedian, Trevor Noah, has made a massive impact on the world as a successful South African comedian in America. While his jokes are funny to almost everyone who listens, he often speaks up about what it was like growing up during apartheid. While he makes people happy with his comedy, he also has important messages to share with his audiences' hearts.



## Caster Semenya

Olympic champion, Caster Semenya, is a middle-distance athlete. Caster was born as a female, but has higher levels of testosterone in her blood than the average woman. This led to a lot of criticism, since people felt that Caster had an unfair advantage when she competed against other women. Despite all the challenges that she has had to face, Caster continues to rise above it all.

## Thuli Madonsela

Thuli Madonsela is a South African lawyer and professor. She is known for being South Africa's Public Protector from 2009 to 2016. During this time, she was responsible for making sure that the South African government did not abuse its power. Thuli also helped draft the final constitution of the new democratic South Africa in 1996. Thuli is truly a fierce model for integrity and fearlessness in justice!

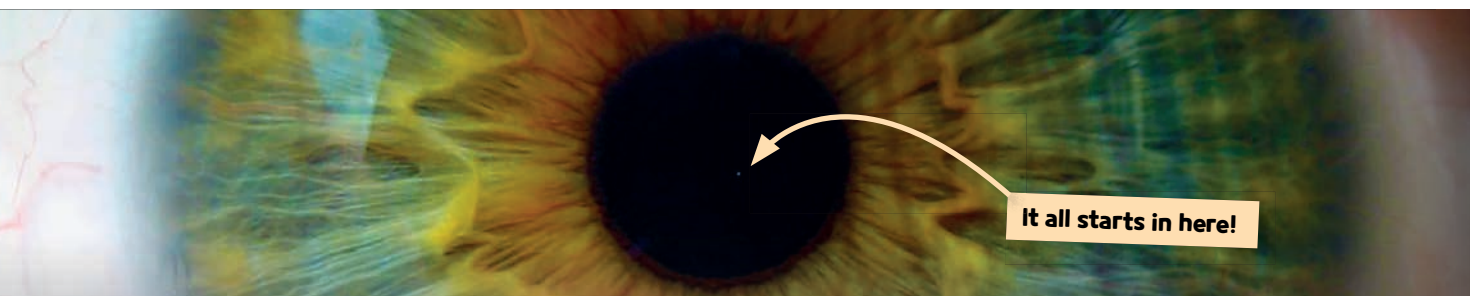


## Ndlovu Youth Choir

The Ndlovu Youth Choir was started in 2009 by the Ndlovu Youth Group, as an after-school activity to help children who come from disadvantaged backgrounds. In 2019, they competed on America's Got Talent and signed a massive recording contract. This just goes to show that no matter your background, you can be whatever you want!



# How do we

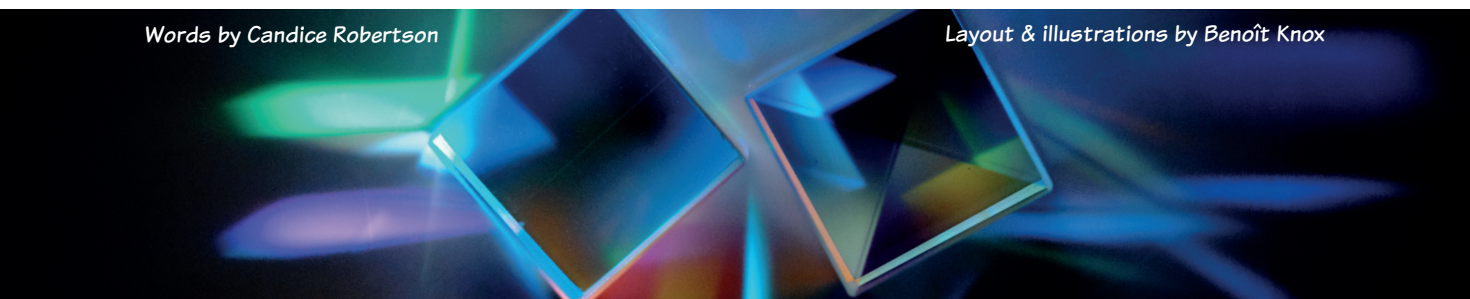


It all starts in here!

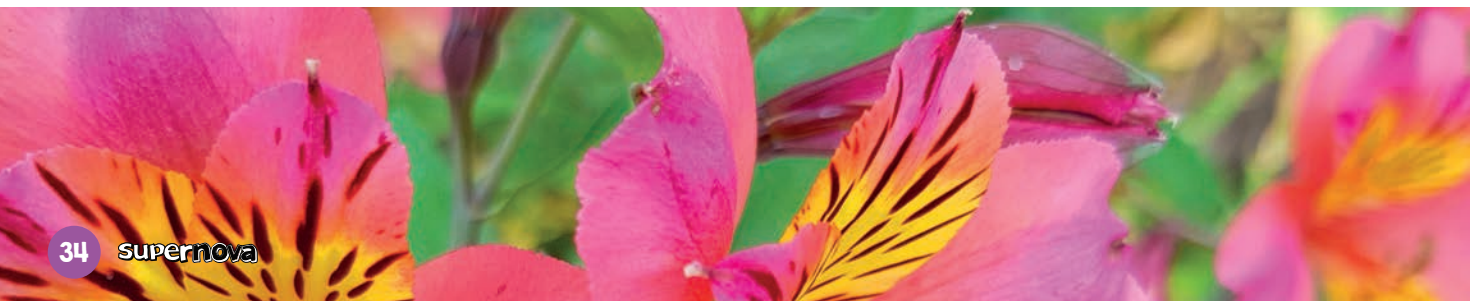
# see colour

*Words by Candice Robertson*

*Layout & illustrations by Benoît Knox*

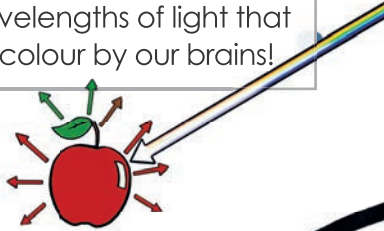


Colours play a very important part of our everyday lives. They make our world more beautiful and interesting to look at, but also help us figure out important information about what is going on around us. Because of colour, you can tell if your fruit is ripe or still bitter, find your car in a parking lot, and know when to slow down, stop or go at a traffic light. But have you ever wondered exactly how our eyes allow us to see all of these awesome colours? And what would the world look like through another animals eyes?



## How eyes work

All of the objects around us do not actually have any colour. Instead, each object reflects different wavelengths of light that are seen as colour by our brains!

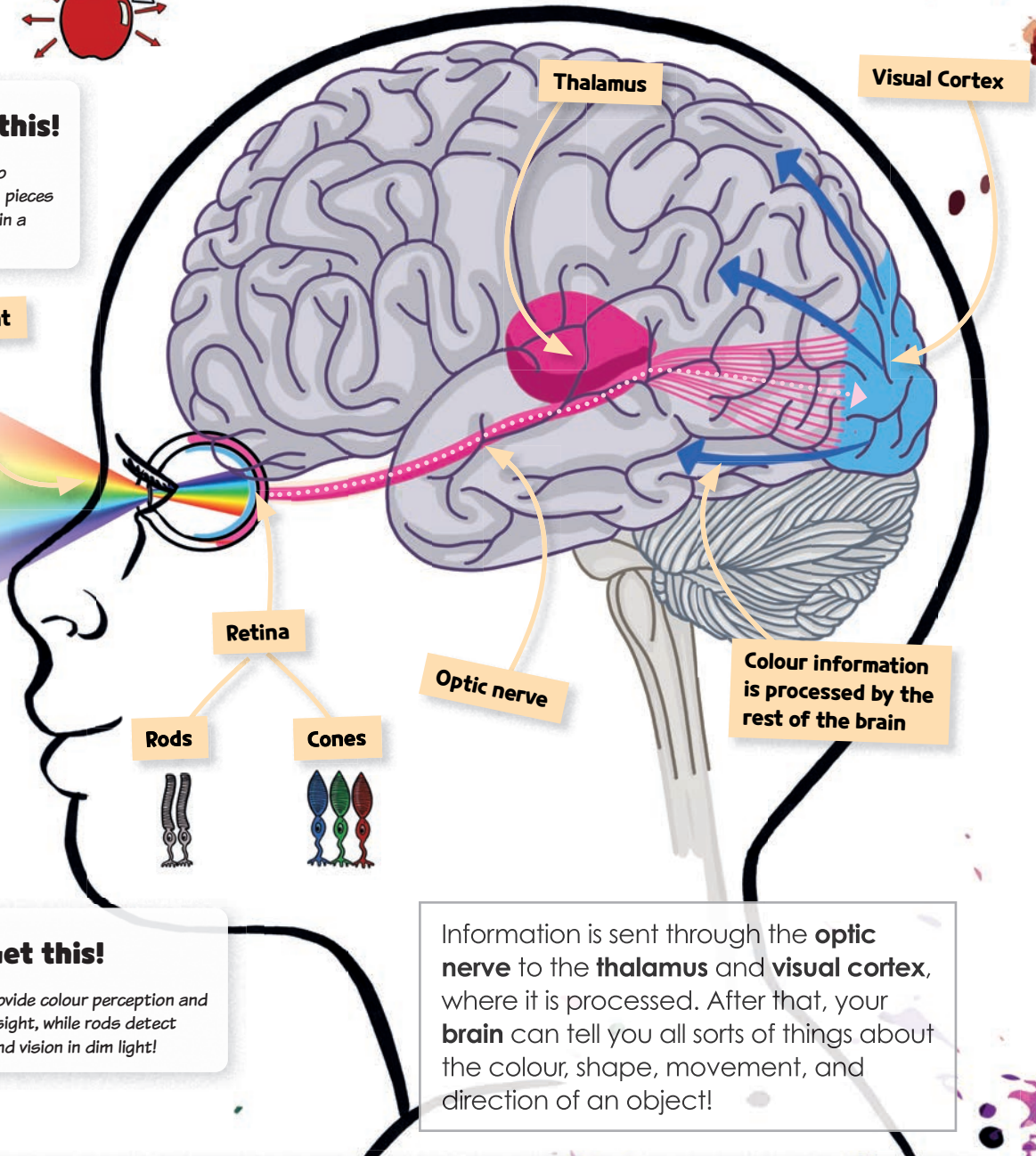


This process starts when reflected light bounces off of an object, and hits your eye. The light is spotted by the tissue in the back of your eye, called the **retina**. The retina has special cells, called **rods** and **cones**, that react to different wavelengths (or colours) of light. Once light hits these rods and cones, they send electrical signals to the brain through the **optic nerve**.

## ?! Get this!

Eyes are able to process 36,000 pieces of information in a single hour.

Light



## ?! Get this!

Cones provide colour perception and detailed sight, while rods detect motion and vision in dim light!

Information is sent through the **optic nerve** to the **thalamus** and **visual cortex**, where it is processed. After that, your **brain** can tell you all sorts of things about the colour, shape, movement, and direction of an object!

## ?! Get this!

Humans can distinguish up to 10 million colours! But there are millions of light waves that we can't see.

What birds and mantis shrimps can see

What we can see

What night-vision cameras can see

←Ultraviolet

Visible light spectrum

Infrared →

# Not all eyes are equal

While most eyes work in the same way, some animals can see more or less colours than humans. This depends on the number and shape of rods and cones each animal has in their eye!

## ?! Get this!

Ultraviolet (UV) light has shorter wavelengths than visible light. Although UV waves are invisible to the human eye, some insects, such as bumblebees, can see them.

### Human eyes




Since humans have three kinds of colour-detecting cones in their eyes, we can see a broad spectrum of

colours! These cones are also known as photoreceptors, and ours can detect **red, green and blue light**. All the colours we can see are made up of a combination of these three colours.

## ?! Get this!

People who are colourblind lack the third kind of cone used to tell the difference between red and green.

### Dog eyes




Dogs' eyes, like most other mammals, have **just two kinds of cones**. This means

that their brains can distinguish blue from yellow, but not red from green. However, dogs have more rods in their eyes, which are good at picking up motion and seeing in dim light.

## ?! Get this!

Dogs have a third eyelid that helps produce tears and keep the eye moist.


### Eagle eyes



Eagles can see things roughly 4-8 times further away than humans, which allows them to hunt small prey while soaring

in the sky. This is because their eye cones are small and tightly grouped. The position of their eyes on the front of their head also gives them accurate depth perception. Eagles have **4 photoreceptors: red, green and blue as well as ultraviolet (UV)**. They can distinguish many more colours than humans, and perceive these colours much brighter than we do.

### Mantis shrimp eyes



Mantis shrimps have the best eyesight and most complex visual system in the animal

kingdom. They have between **12 and 16 photoreceptors which means they can detect ten times more colour than a human**, and see more colours than any other animal on the planet. They can also see UV, visible and polarised light. Their eyes are on separate stalks and can move independently, so they can keep an eye out for predators and prey in different directions.

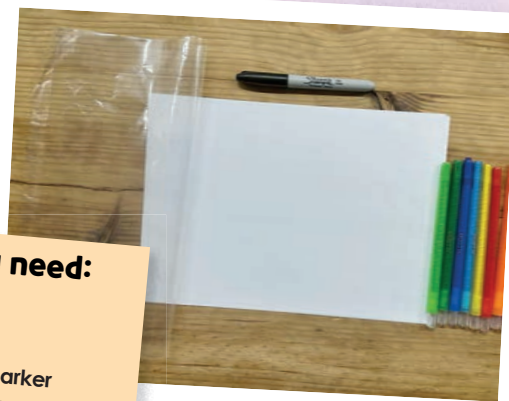
# Magic color eraser

It is not actually magic, it's just the physics of light. Let's learn what's happening.



## What you need:

- Paper
- Colouring pencils
- Black permanent marker
- Plastic file sleeve or Ziplock bag
- A bucket filled with water



1 Draw any picture with lots of colours. We used a rainbow.



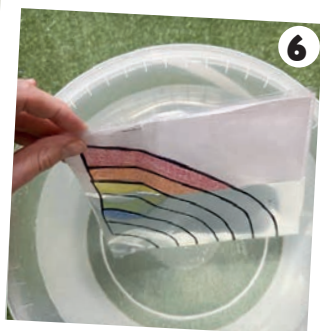
2 After drawing the picture, put the paper into a clear plastic sleeve and seal it closed.



3 With the black permanent marker, trace over the lines of the picture on the plastic.



5 After that is done, grab your bucket and fill it with water.



6 Place the sealed drawing in the water and watch as the colours disappear.

## ?! Get this!

We see colour because of how light reflects off of things, and when it passes through a different medium (air or water) this can shift how it gets reflected.

In this case, the water and the plastic change how the light travels, so the light reflected from the colours no longer reaches our eyes.

Now show your friends and family, and impress them with this cool trick and the science behind it!

# The art of rock balancing

Words by Edward Allemann

Did you know that just about all rocks can be balanced? With enough care, thought, rotation, and balance, you can build balanced piles of rocks that look like they defy physics.

## The art of rock balancing

Rock balancing has been around for a long time and is seen by some as a form of meditation, art, or hobby. Part of the experience is knowing that this will not be a permanent sculpture, but for some time will interact with and be part of the nature around it.

### ?! Get this!

Many people take down their rock towers when they are leaving an area to make sure that the rocks end up back where they belong, and that no damage is done to the environment.

## Standing significance

Stacks of rocks can be built with a firmer foundation to stand as markers for longer periods. These are called cairns and are sometimes used to mark things like hiking trails, mountain tops, historical roads, and burial spots.



Photo: Kubota Takeharu



Photo: Manu Tope

# Build your own rock tower!

Pretty much all rocks can be balanced, though some are easier than others. It's all about finding the balancing point of one rock and lining that up with another rock (and another, and another).

Pick up a rock and find the heaviest point. This is the point that you want to balance the rock around. The bigger this area is, the easier the rock will be to balance.

Choose your starting surface and place your first rock with the heavy side facing down. The top should still have enough space and a good spot for you to place your next rock.

Keep repeating these steps to make your tower taller.



## Warning

Be very careful of your hands and feet, and don't use any rocks that are too heavy.

Now you can experiment with different and interesting designs! Try things like counterbalanced rock stacks, or seeing how far off the center of gravity you can stretch your tower before it collapses.



## Warning

Make sure nothing gets hurt if your tower falls over. It is best to knock them over when you leave somewhere, so they cannot fall on something by mistake.

Be careful about where you get the rocks, and where you balance them. Rocks help protect soil from erosion and give small animals and insects somewhere to live. Falling rocks can also be very dangerous. Some hiking trails also use stacks of rocks to show hikers where they should go, and a badly positioned rock tower might lead them down the wrong path.



Step 1

Step 2

Step 3

Step 4



## Get this!

The closer to their center that rocks are balanced, the easier it will be to add more rocks on top without the whole tower falling.



## Get this!

Bigger rocks can help hold things down if they are well balanced, but they can also make the tower fall over more easily if they are put higher up.



Photo: Edward Allemann

# Super Safari



Let's go on a safari in the Kruger National Park! The game ranger gives you a list of some of the animals you could spot on a game drive.

1. Find the animals in the wordsearch. Circle the 13 words.

Cheetah

Caracal

Mamba

Impala

Python

Zebra

Eagle

Kudu

Chameleon

Springbok

Pangolin

Hornbill

Waterbuck

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

2. The game ranger has left you a secret message in the wordsearch. Find the letters for each colour and write them below to discover the message.



# Test yourself

How much did you understand about how our eyes see colour?



Read the article, *How Do We See Colour* on page 34-37.

Then, answer the following questions from the text.



1. Read the sentences below, and write if they are **true** or **false**.

a. Objects reflect wavelengths of light that we see as colour. \_\_\_\_\_

b. Humans can distinguish up to 2 million colours. \_\_\_\_\_

c. UV light stands for Ultra Visible light. \_\_\_\_\_

d. Eagles have more cones in their eyes, while dogs have more rods. \_\_\_\_\_

2. Unscramble the words, then use them to fill in the blanks.

terani

sophoterceport

noce

cotip

a. The back of your eye is called the \_\_\_\_\_.

b. Electrical signals are sent to the brain through \_\_\_\_\_ nerves.

c. Manits shrimps have 16 \_\_\_\_\_ which allow them to see colour.

d. Colourblind people lack a third \_\_\_\_\_ in their eye.

## ! Reading Tip

Reading makes you smarter – it's a fact. Be sure to keep up good reading habits:

- Read anything
- Find a topic that excites you
- Read something difficult sometimes
- Ask someone to recommend a book
- Talk about the things you've read – reading is contagious!



Here's a fun new book to read!



Available now  
**Bookshoponline**  
SHOP.BKUBLISHING.CO.ZA

I AM SO GLAD TO FINALLY MEET YOU AND CHANGE PEOPLE'S PERCEPTIONS ABOUT PIRANHAS. THERE IS SO MUCH NEGATIVE INFORMATION OUT THERE ABOUT YOU.

LIKE WHAT?

YOU KNOW, LIKE THE USUAL CLICHE THAT YOU CAN DEVOUR YOUR PREY IN JUST A FEW MINUTES.

FIVE, FOUR, THREE, TWO, ONE!

GULP!

THAT YOU RUTHLESSLY ATTACK ANYTHING THAT MOVES...

INCLUDING AMAZONIAN TAPIRS!

THAT YOU PROWL ABOUT AND HUNT IN GANGS!

GNASHER, YOU BLOCK THE EXIT. PATCH, YOU KEEP YOUR ONE EYE OUT FOR TROUBLE...

...THE REST OF YOU, STICK TO ME LIKE SCALES. LET'S GO!

THAT YOU CAN SMELL BLOOD FROM KILOMETRES AWAY... THINGS LIKE THAT.

PFFT... THAT'S ALL FALSE, BY THE WAY.

PEOPLE ALWAYS WANT TO EXAGGERATE. IT GIVES US SUCH A BAD REPUTATION.

IT'S A TOTAL PAIN IN THE GILLS.

...LIKE THAT "FACT" ABOUT US DEVOURING OUR PREY IN A FEW MINUTES...

TOTALLY FALSE!

IT MOSTLY ONLY TAKES US A FEW SECONDS!

DINNER'S SERVED!

# How do I finish what I start?



Often, we make lots of excuses to avoid doing the tasks we don't feel like doing. But, the best thing to do is to stop making excuses and just do it! Your future self will thank you!

**Jabu** 15 years old

I'm feeling disheartened because I can never seem to finish anything that I start. I started learning how to play the piano, but I quit going to my lessons. I also joined the art club, but everyone's art was better than mine, so I only went to one class. How can I commit to finishing what I start?

Lots of us have a million different things we want to learn and accomplish. And while it's great to chase as many of them as we can, it's just not possible to do everything. Over time, you might lose motivation and feel less excited to finish what you started. One of the ways to avoid this is to commit to fewer activities and projects! That way, you can avoid becoming overwhelmed and distracted, and focus on the activities that are

most important to you. You can also break down each activity into steps, so you know what to expect and how long it might take. Working in chunks also makes it easier to achieve your goals! Most importantly, know yourself, what you like, and set goals that you know you will be able to achieve! That way, it won't be hard to stay focused on what you know you like doing.

## Have a question for Candice?

Do you have a burning issue on your mind? Need advice? Send your questions to [supernova@bkpublishing.co.za](mailto:supernova@bkpublishing.co.za) and Candice could give you advice next!

# ENTER & WIN

SA HOMESCHOOLING AND BEYOND'S  
2023 DRAWING COMPETITION

**LAST  
CHANCE TO  
ENTER!**

It's our 2023 Drawing Competition!

This initiative is aimed at encouraging children to express themselves through drawing, inspiring creativity, stimulating the imagination and encouraging artistic skills. There are four age categories, all with the same theme.

**Theme: Why I love South Africa**

**5-8 years, 9-12 years,  
13-17 years and 18-21 years**

Entries must be e-mailed to:  
[sahomeschooling@isikhova.co.za](mailto:sahomeschooling@isikhova.co.za)  
with "Drawing Competition"  
clearly stated in the subject  
line along with:

**Your full name  
Contact number  
Child's name and age  
Title of drawing**

The competition will run for two issues, this being the first. Every fortnight we'll post a section of entries from each category on our social media pages. Winners' names will be announced in our last issue of the year, online in November.



**CAPKids**  
Educational Resources  
[www.capkids.co.za](http://www.capkids.co.za) | 061 890 0316

  
**PEOPLES THEATRE**

# DOCTOR RIP EXPLAINS

EVEN IF THERE ARE MINIMAL RISKS TO GOING ON A ROLLERCOASTER.

THESE AMUSEMENT RIDES DO ACTUALLY KILL PEOPLE EVERY YEAR.

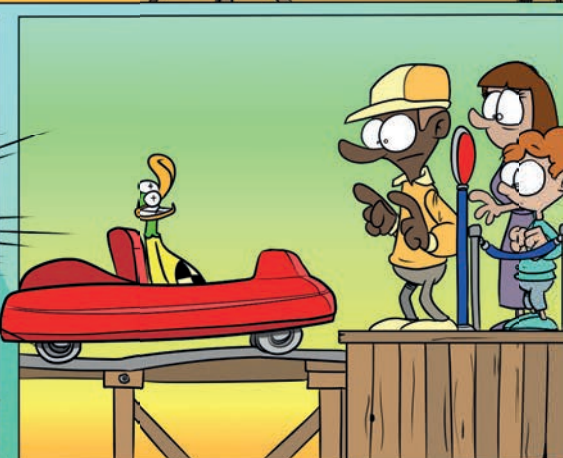
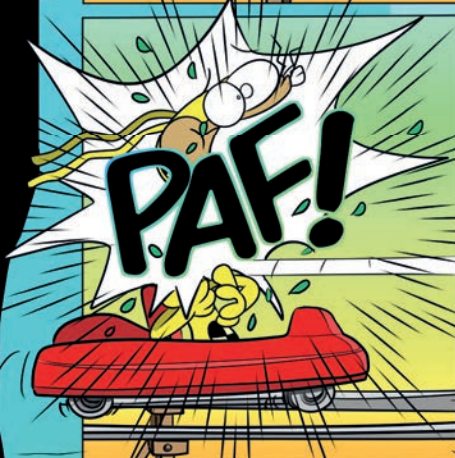
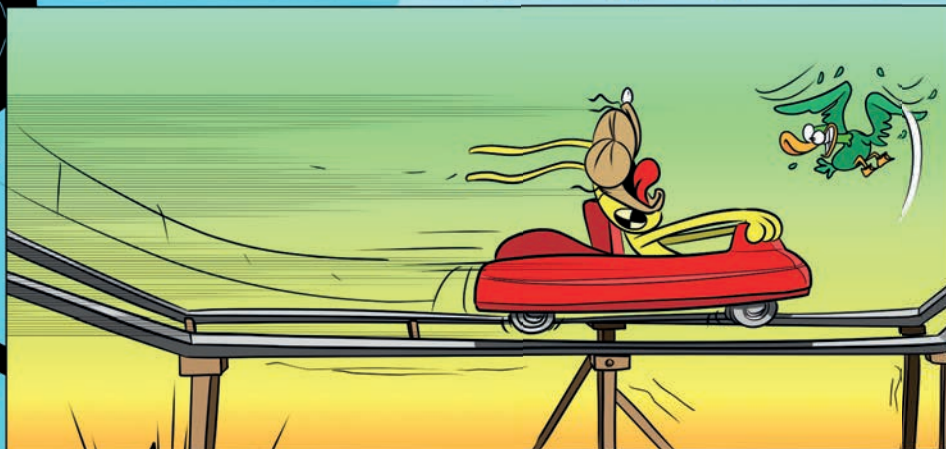
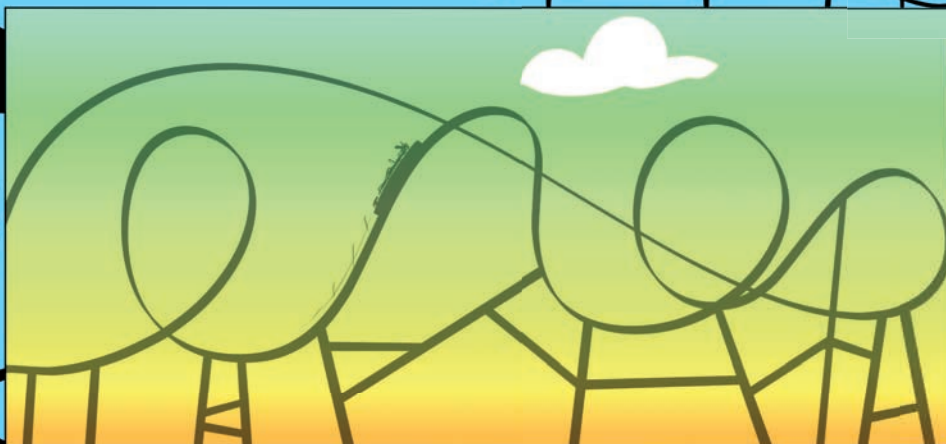
THERE IS A **1 IN 24 MILLION** CHANCE OF DYING ON ONE OF THESE POPULAR FAIRGROUND ATTRACTIONS.

IN THE USA, AN AVERAGE OF **4 PEOPLE** FIND THEIR END AT THE END OF THE LINE.

THE MAIN CAUSES INCLUDE PEOPLE BEING EJECTED FROM THE WAGON.

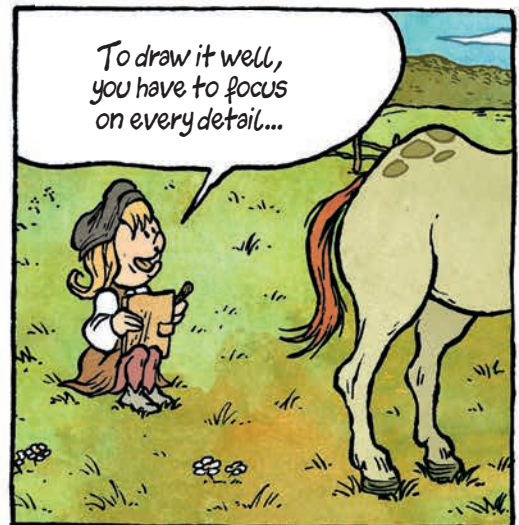
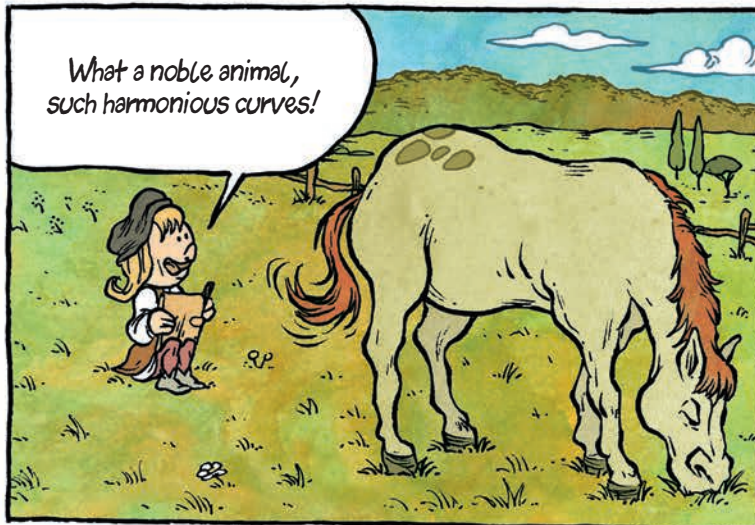
...OR THE MALFUNCTION OF THE WAGON ITSELF ...

...AND OF COURSE, PEOPLE DOING SILLY THINGS.

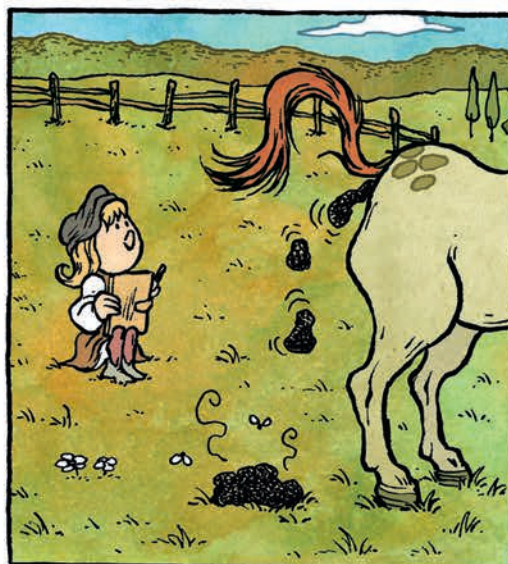




# Perfection



...and perfection  
is not a detail...



...depends on  
the detail...

