GROW SMART

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DEAR GROWSMARTER

Give us a high five! You're rocking through the year and just growing smarter. Well done! But our work here is not done yet.

Welcome to the second edition of the Growsmart newspaper for 2019. It's packed with awesome activities and the stuff you want to know more about. Like 10 surprising bug facts and why our seasons change.

To flex your mathematical muscles, work your way through more than 50 questions. Some will be easy and some will give your brain a good stretch! But don't give up. The more you practise, the better you'll become at mathematics.

Do you have a love hate relationship with homework? You love to learn, but you hate that it cuts into your play time? This is called an oxymoron. You'll find out how you can use this figure of speech in your next story.

Professor Thandi is back with two science experiments. You can do them at home or with your class at school. Get your green cap on for the story on our plastic planet. What can you do to reduce your plastic usage?

The Growsmart Debating Competition is in its second year and we love your enthusiasm! Find out how you can improve your argument and become a better listener too. Good luck!

Until next time,
The Growsmart Team

MATHEMATICS

ANSWER AS MANY AS POSSIBLE. DO NOT PAUSE IF YOU DO NOT KNOW THE ANSWER IMMEDIATELY.

1. 29 + 11 = _____
2. 16 + 10 + 6 = _____
3. 125 – 5 = _____
4. 250 + 250 = _____
5. 119 – 100 = _____
6. 110 + 110 = _____
7. 299 + 2 – 1 = _____
8. 300 x 3 = _____
9. 100 ÷ 100 = _____
10. 4 500 x 0 = _____
11. 90 x 90 = _____
12. 999 + 2 – 2 = _____
13. 3 x 300 = _____
14. 2 000 x 20 = _____
15. Half of 13 = _____
16. 200 ÷ 4 = _____
17. 13 x 3 = _____
18. 1 000 ÷ 500 = _____
19. 17 x 20 = _____
20. 190 x 2 = _____
21. 120 x 2 x 2 = _____
22. 100 x 10 ÷ 100 = _____
23. 44 ÷ 11 = _____
24. 15 000 x 2 = _____
25. 500 x 3 = _____
26. 280 ÷ 2 = _____
27. 630 ÷ _____ = 70
28. 5 000 ÷ 5 = _____
29. 1 000 ÷ 2 x 2 = _____
30. 1 000 + 1 200 = _____
31. 1 ½ + 5 ½ = _____
32. 0,1 + 0,01 = _____
33. 5 ⅝ + ⅜ = _____
34. 750 + 150 = _____
35. 13 + 12 + 15 = _____
36. 177 = 147 + _____
37. 440 = 140 + _____
38. 1 091 – _____ = 1 000
39. 345 + 1 = _____
40. 15 – 13 + 18 = _____
41. 75 x 100 = _____
42. 1 x 20 000 = _____
43. 15 x 15 = _____
44. 1 999 x 0 = _____
45. 100 ÷ 1 000 = _____
46. 0,3 + 0,7 = _____
47. 1, 5 + 1,5 – 3,0 = _____
48. 0,4 x 0,8 = _____

Answers: 1. 40; 2. 32; 3. 120; 4. 500; 5. 19; 6. 220; 7. 300; 8. 900; 9. 1; 10. 0; 11. 8100; 12. 999; 13. 900; 14. 40 000; 15. 6 ½; 16. 50; 17. 39; 18. 2; 19. 340; 20. 380; 21. 480; 22. 10; 23. 4; 24. 30 000; 25. 1500; 26. 140; 27. 9; 28. 1000; 29. 1000; 30. 2200; 31. 7; 32. 0,11; 33. 6 ⅛ or 5 ⅝; 34. 900; 35. 40; 36. 30; 37. 300; 38. 91; 39. 346; 40. 20; 41. 7500; 42. 20 000; 43. 225; 44. 0; 45. 0,1; 46. 1; 47. 0; 48. 0,32

MATHEMATICS

CALCULATE THE FOLLOWING. YOU MAY USE ANY STRATEGY.

1. 4 250 + 100 + 1 = _____
2. 40 000 ÷ (0 + 20 000) = _____
3. 99 901 x 100 + 2 = _____
4. 23 550 x 1 000 x 10 = _____
5. 625 ÷ 25 x 2 = _____
6. (26 999 + 101) x 100 = _____
7. 3 200 + (18 000 – 12 000) = _____
8. 35 000 x 0 ÷ 1 = _____
9. 89 588 222 ÷ 2 + 29 000 = _____
10. (51 999 – 99) ÷ 2 + 3 500 = _____
11. 45 + 15 – 25 = _____
12. 56 ÷ 7 = _____
13. 234 + 456 = _____
14. 1 024 – 25 x 2 = _____
15. 12 567 + 24 433 = _____
16. 550 x 1 100 = _____
17. 625 ÷ 25 = _____
18. 833 + 67 x 100 = _____
19. 1 200 + (800 – 200) = _____
20. 525 x 4 ÷ 4 = _____
21. 124 – 6 – 2 = _____
22. 119 + 12 + 9 = _____
23. 17 + 14 + 1 = _____
24. 36 ÷ 12 = _____
25. 49 ÷ 7 = _____
26. 89 x 2 = _____
27. 1 000 x 10 = _____
28. 28 ÷ ___ = 14 _____
29. 63 ÷ _____ = 7
30. 500 ÷ 2 = _____
31. 1 000 ÷ 2 = _____
32. 1 250 + 1 250 = _____
33. ½ + ¼ = _____
34. 131 – 19 = _____
35. ⅝ + ⅜ = _____
36. 27 + 113 = _____
37. 13 + 12 + 35 = _____
38. 77 = 47 + _____
39. 44 = 14 + _____
40. 13 = 93 – _____
41. 150 x 3 = _____
42. 40 x 8 = _____

Answers: 1. 4 351; 2. 2; 3. 9 990 102; 4. 235 500 000; 5. 50; 6. 2 710 000; 7. 9 200; 8. 0; 9. 44 823 111; 10. 29 450; 11. 35; 12. 8; 13. 690; 14. 974; 15. 37 000; 16. 605 000; 17. 25; 18. 7 533; 19. 1 800; 20. 525; 21. 116; 22. 140; 23. 32; 24. 3; 25. 7; 26. 178; 27. 10 000; 28. 2; 29. 9; 30. 250; 31. 500; 32. 2 500; 33. ⅝; 34. 112; 35. 1; 36. 140; 37. 60; 38. 30; 39. 30; 40. 80; 41. 450; 42. 320

MATHEMATICS

SOLVE EACH PROBLEM. YOU MAY USE ANY STRATEGY.

1. Divide R400 in the ratio 2:3

   _____

2. A man earns R80 per hour. How much does he earn in 2 ¾ hours?

   _____

3. John saves 20% of his pocket money. How much does he save if he receives R80 pocket money?

   _____

4. If 27 kg tomatoes cost R135, how much will 20 kg tomatoes cost?

   _____

5. A company donated containers with tennis balls to 52 schools. In each container there are 345 balls. How many balls were donated?

   _____

6. Peter wants to buy a television that costs R4 500. He has already saved R3 800. How much more money does he need?

   _____

7. Mrs Manga bought 42 shirts for her workers. Each shirt costs R120. How much did she pay altogether?

   _____

8. Mrs Jansen uses 2 cups of self-raising flour to bake 24 cupcakes. How much self-raising flour would she use if she wanted to bake 6 cupcakes?

   _____

9. When Gary gives his small dog 1 biscuit, he gives his big dog 2 biscuits.
   a. If his small dog gets 3 biscuits, how many will his big dog get?
   b. If his big dog gets 12 biscuits, how many biscuits will his small dog get?

   _____

10. Gary gives the dogs 21 biscuits. How many biscuits will his small dog get and how many biscuits will his big dog get?

    _____

Answers: 1. 160:240; 2. R220; 3. R16; 4. R100; 5. 17 940; 6. R700; 7. R5 040; 8. 2/4 or ½; 9a. 6; 9b. 6; 10. small = 7; big = 14

THE BUILDING BLOCKS OF A DEBATE

Debating will help you develop logical reasoning and critical thinking skills. Both of these skills will benefit you at school and when you enter the big world. A good debate is more than just an argument or a discussion about a specific topic. It's the ability to understand an idea from different perspectives. Let's look at the basic structure of a debate.

When working on your argument, it's important to start with your strongest points. Structure your debate like this:
"This house believes that a vegan lifestyle is better than a meat-eating lifestyle for three reasons. Firstly (your most important argument… Secondly… Thirdly (your least important argument)…"

Follow these steps to structure each reason:

CLAIM: Use a clear statement to present your argument. The claim is your reason for supporting or opposing the motion.

EVIDENCE: Provide evidence to support your claim. You can use statistics, quotes, references or analogies.

IMPACT: Explain how the evidence supports your claim.

Source: virtualspeech.com

DEBATE LIKE A PRO

At first, taking part in a debate might seem overwhelming. But don't worry! The more you practise, the more confident you'll be. If you focus on the points listed below, you'll sound like a pro in no time!

CONTENT

- Make sure your arguments are relevant to the motion.
- Provide evidence instead of your personal opinion.
- Nothing wrong with being passionate about a topic, but try to stay objective during your debate.
- Don't bore your audience with complicated statistics – keep your argument simple.

VOICE

- Speak at an even pace – not too fast but fast enough to deliver your speech in time.
- Allow enough time for a few dramatic pauses.
- Use your tone of voice to emphasise important words.

LANGUAGE

- Use simple language.
- Refer to the opposite side as: "My opponent".
- When you make a rebuttal, say: "My opponent said…, however…"
- Avoid exaggeration – words like "never" and "always".

BODY LANGUAGE

- Try to maintain eye contact with your audience, instead of staring at the ceiling or floor.
- To improve your confidence, make sure you know what you want to say.
- Relax and have fun!

Source: virtualspeech.com

THE GREAT DEBATE

Let's look at possible arguments you can have in favour of and against the motion 'Bullies should be expelled from school'.

Source: edb.gov.hk

PROPOSITION

First speaker: This house believes that bullies should be expelled from school because bullying is a major problem and six out of ten students in primary schools have been bullied. We must take strong action. If the bully is expelled, students will see that the issue is important.

OPPOSITION

First speaker: This house believes that the problem of bullying is important, but it is not practical to expel 24% of all primary school students. The definition of bullying is broad. We can't expel a student every time he or she insults another student. Bullies often come from difficult homes. We can't solve a problem by sending them back home.

PROPOSITION

Second speaker: We agree that we cannot expel 24% of primary students. The definition of bullying cannot be too broad. There should be enough evidence. Once there is enough proof, for example, eyewitness accounts of fights or continued verbal abuse, the school should expel the bully.

OPPOSITION

Second speaker: My opponent underestimates the difficulty of proving bullying. This resolution is all about punishment and the desire to hurt the bully. Experts have suggested many activities that help to create a peaceful, loving and respectful environment that does not support bullying.

PROPOSITION

Third speaker: Bad intentions exist even if we are positive and loving. If the teacher responds to bullying by offering extra attention, the bully will be encouraged to continue. Bullies only understand punishment and the punishment must be strong.

OPPOSITION

Third speaker: Preventative methods are the best way to deal with bullying as suffering is avoided. Research by the University of Stellenbosch shows that harsh punishment is not effective to stop bullying. Punishment for bullies is sometimes necessary, but they should still be treated as part of the class.

Which team do you think has the strongest argument? Give reasons for your answer.

CLASS ACTIVITY

SEE BOTH SIDES

In a debate you will always have two teams – one team for the motion and the other team against the motion. Use this activity to practise preparing an argument for both sides. Choose one of the debate topics below.

DEBATE TOPICS

- Should cell phones be allowed at school?
- Is global warming a problem?
- Are celebrities good role models?
- Should detention be banned?
- Does social networking have a beneficial effect on society?

LISTEN UP!

A debate will not only help to improve your confidence but also your ability to listen effectively. We bet your parents and teachers will be overjoyed if you develop this skill!

During a debate, you have to listen carefully to the arguments of the other team. Pay attention to their key points, supporting evidence and any weakness in their reasoning. This will help you to form a strong rebuttal.

What can you do to be a better listener? Focus on the speaker and on what the speaker is saying. Try not to think about your own argument or the rebuttal. Don't get distracted by the audience or your team members.

3 LISTENING TIPS

You can use these tips outside of a debate too!

- **Show interest in the speaker.**
- **Take note of the speaker's body language.**
- **Train your mind to focus by playing games that require concentration, such as word puzzles (try the one on page 8!) and the card game Uno.**

Source: quizlet.com

WHEN I GROW UP...

Not too long ago, we lived in a world without cell phones and the internet. No Google maps or online dictionaries. Can you imagine that?! Many useful tools that form part of our daily lives didn't even exist 15 years ago.

The jobs we know today will look very different by the time you finish school. By 2025, machines will take over 5 million jobs. But there's no need to worry! Your future job will likely be more exciting than past careers. Machines will handle all the menial jobs, so humans can focus on finding innovative solutions to complex problems, like pollution.

7 ESSENTIAL SKILLS

1. Problem Solving

You'll need a bendy brain that can think outside the box to solve problems of the future. Fortunately, you can develop this skill with a bit of practice. Tackle a variety of challenging problems to stretch your brain.

2. Critical Thinking

While machines will be able to do many jobs that currently exist, critical thinking won't be part of their skill set. To be a critical thinker, you need to consider different solutions and make decisions based on logic and reasoning.

3. Creativity

Robots might beat humans at spotting problems and doing calculations, but they're not the best at being original. Nurture your creativity and no robot will steal your job!

4. People Skills

When technology takes over the world, it'll be us against the machines! Exceptional people skills will come in handy to manage people and robots. Having empathy, being a good listener and getting in touch with your emotions are crucial.

5. STEAMAC

Proficiency in science, technology, engineering, art, mathematics, agriculture and coding (STEAMAC) will remain sought after in the future. To keep up with technology, you'll have to keep your STEAMAC skills up to date. One way to do this is to learn how to code. And keep learning.

6. Interdisciplinary Knowledge

Future problems need creative solutions. As an innovator, you'll have to use information from various fields to come up with awesome ideas. Practise this skill by reading as much as you can and as wide as you can. Don't just focus on one subject.

7. SMAC

Ever heard of SMAC? The acronym stands for Social, Mobile, Analytics and Cloud. And if you want to stand out in the future job market, it's just as important as STEAMAC.

JOBS OF THE FUTURE

Trash Engineer

Not very glamorous, true, but trash engineers will be crucial to ensure we don't end up living on a garbage dump straight out of Wall-E (watch this movie!). Every year, we produce more trash than we can handle and soon we'll need a trash engineer to solve the world's garbage problems one plastic bottle at a time.
Essential skills: STEAMAC, critical thinking, problem solving

Alternative Energy Consultant

Forget fossil fuels. Solar, wind and hydroelectronic power is the future. Alternative energy consultants will be in high demand to advise which energy source is best for the home, city or community.
Essential skills: STEAMAC, problem solving, people skills

Medical Mentor

Before you know it robots will be diagnosing whether you have a bladder infection or appendicitis and performing surgery without missing a beat. Medical mentors will be responsible for the after care, which is just as important! If you can imagine yourself as a personal trainer, dietician, psychologist and friend all in one, this job is for you.
Essential skills: STEAMAC, critical thinking, problem solving, people skills and interdisciplinary knowledge

Personal Productivity Person

Technology enables us to work faster and better, but it can also lead to the opposite – inefficiency. Think about how many distractions you have to fight off during study time – Facebook, Instagram, 24-hour news.

As you get older and technology continues to evolve, your distractions will grow! The solution? A personal productivity person who will help people to work smarter and harder without letting distractions get in their way!
Essential skills: Critical thinking, creativity, problem solving, people skills, SMAC and interdisciplinary knowledge

Source: crimsoneducation.org

VUYO & GEMMA GO CAMPING

It was a sunny Friday afternoon in Mouseville. Vuyo was busy loading the Cheesemobile with tiny tents and logs for firewood. The quadruplets were beyond excited. They were going on their first camping trip.

"Dad! Dad! Are we going to sleep under the stars?" "Can we braai marshmallows?" "Will there be creepy-crawlies?" "Or lake monsters?" Vuyo laughed at the chorus of questions. "You'll have to wait and see!" he answered.

When they arrived at the campsite, they found a comfortable spot underneath the trees and near the lake. The sun made the water sparkle like diamonds. "Let's go for a swim!" Petra shrieked. "Good idea!" her siblings replied in unison. The quadruplets scrambled out of the car. While Vuyo and Gemma were pitching their tents, they could hear squeals of laughter and water splashing. The quadruplets were racing to see who could swim the fastest. No one was competition for Michael. But Emma was hot on his heels. Suddenly, Michael shouted, "Help! The lake monster!" He waved his arms in the air and disappeared under the water.

Without thinking twice, Emma raced towards Michael. Petra and Jonah started swimming in the opposite direction, taking big gulps of water. Emma dived under the water to save her brother. Within a few seconds, they resurfaced. Michael started laughing. "Got you!" he shouted. "What? Where's the lake monster?" Petra cried out from the shore. "There IS no lake monster!" Emma replied with a scowl. Upset that their brother tricked them, they abandoned Michael and the lake to follow the smell of grilled cheese instead. Again, they heard Michael calling for help, but they ignored his pleas.

While Emma, Petra and Jonah shook the water from their furry bodies, Gemma asked: "Where's Michael?"

"The scary lake monster caught him," Emma replied with a scoff. Petra and Jonah burst out laughing. But Gemma was worried. She dashed towards the lake. "Mom, he's just pretending!" Jonah called after her.

But Michael was nowhere to be seen. Gemma was about to dive into the water when she noticed a tiny figure sitting on a rock. She breathed a sigh of relief. When she reached Michael tears were streaming down his furry face. "No one came to save me… and I was in trouble! For real this time!" A giant fish mistook his tail for food and pulled him under the water. Lucky for Michael a mouse tail tastes like rubber and the fish was not impressed.

Gemma gave him a hug and said: "Remember my boy, nobody believes liars, even when they speak the truth. So if you want people to trust you, never cry wolf. Or in your case, cry lake monster!"

DO YOU KNOW WHAT THESE WORDS MEAN?

diagnosis	banquet	egregious	callisthenics	vertex	pedestrian	bureau
ubiety	fiefdom	forfeit	licentious	uncountable	meander	odious
wintry	gallant	adenoids	adjutant	serendipity	reassess	malfeasance
cacophony	occupation	kennel	pandemonium	obelisk	karaoke	acrostic
lexicography	idiosyncrasy	hullabaloo	nebulous	narcissism	acquisitive	sedentary
facetious	flammable	domineer	vertebrate	palaeontology	offensive	tautology
masquerade	discourteous	inauspicious	legume	vociferous	scapegoat	kitchenette
embourgeoisement	gregarious	hiatus	neuroscience	feasible	haphazard	eloquent
tenacious	bequeath	emaciated	tabouret	gratuitous	quadrant	opaque
catastrophe	celestial	diaphanous	abstemious	rapturous	jouissance	nasogastric
boisterous	tabloid	bureaucracy	wingover	magnanimous	vicissitude	genetics
mausoleum	ignominious	juvenile	ominous	quotation	beleaguer	percussion
voluminous	flagrant	imbue	ubiquitous	rebuttal	defeasance	quintile
abattoir	deciduous	hypocrisy	yachtsman	oesophagus	quiescent	macadamia
eccentric	absenteeism	carapace	mannequin	inanimate	septicaemia	jeopardise
zealous	neophyte	kaleidoscope	languor	therapeutic	nostalgia	raconteur
hereditarian	gorgeous	incarcerate	reconciliation	feuilleton	effervescent	sacristy
acclimatise	kindergarten	hypochondriac	benchmark	juxtapose	liquescent	wabbit
disingenuous	unscrupulous	debauchery	paranoia	lineage	haughty	unceremonious
kleptomania	ceasefire	judgement	jurisdiction	carnivorous	grievance	nefarious

DO YOU KNOW THESE IDIOMS?

1. A bird in the hand is worth two in the _____
   (What you have is worth more than what you might have later)
2. Speak of the _____
   (The person you were just talking about arrived)
3. A penny saved is a penny _____
   (Money you save today can be spent later)
4. By the skin of your _____
   (Just barely)
5. Comparing _____ to oranges
   (Comparing two things that can't be compared)
6. Don't count your chickens before they _____
   (Don't count on something good happening until it's happened)
7. He has bigger _____ to fry
   (He has bigger things to take care of than what we're talking about now)
8. He's a chip off the old _____
   (The son is like the father)
9. It's raining _____ and _____
   (It's raining hard)
10. Take it with a grain of _____
    (Don't take it too seriously)

Answers: 1. Bush, 2. Devil, 3. Earned, 4. Teeth, 5. Apples, 6. Hatch, 7. Fish, 8. Block, 9. Cats/dogs, 10. Salt

CLASS ACTIVITY

IN THE SPOTLIGHT

In this fun class activity, you and your team will act out an idiom for the rest of the class to guess. Divide into groups of five or less and choose one of the idioms below. Enjoy the spotlight!

A BITTER PILL
Meaning: A situation or information that is unpleasant but must be accepted.

KILL TWO BIRDS WITH ONE STONE
Meaning: To accomplish two different things at the same time.

THE ELEPHANT IN THE ROOM
Meaning: The problem people are avoiding.

A STORM IN A TEACUP
Meaning: A big fuss about a small problem.

SHAPE UP OR SHIP OUT
Meaning: Work better or leave.

HAVE YOUR HEAD IN THE CLOUDS
Meaning: Not concentrating.

IT TAKES TWO TO TANGO
Meaning: A situation involves two people and they are therefore both responsible for it.

MAKE HAY WHILE THE SUN SHINES
Meaning: Take advantage of a good situation.

DON'T JUDGE A BOOK BY ITS COVER
Meaning: A person or something may look bad from the outside, but is good inside.

OUR RAINBOW NATION

"A world committed to peace, a world in which we are all a family, a world in which we are all heard, cared for and loved." Archbishop Desmond Tutu

South Africa is a melting pot of people from different cultures. We are one of the most diverse countries in the world! For this reason, we are known as the 'Rainbow Nation'. Each culture adds a unique flavour to South Africa. We have 11 official languages plus 8 recognised languages! How many languages can you speak or understand?

As much as we are different, we also share similarities. For instance, your friend might belong to a different religion or speak a different language at home, but you both love soccer. Don't be afraid to experience a different culture. Try the food, join the celebrations and listen to traditional music. Our differences make the world such an interesting place.

One way to show respect for someone else's culture is to learn more about what makes it so special. Let's start with the vibrant and rich cultures in our own country!

KHOISAN

The Khoisan were South Africa's first inhabitants. They still follow a nomadic lifestyle, which means they constantly move from one place to another. As excellent hunters and trackers, their skills are invaluable in the fight against poachers. Their incredible rock paintings can be found throughout the country.

ZULU

Fierce, shield-bearing warriors, the Zulus were known for their military innovations, such as the assegai. The Zulu Kingdom rose to prominence under the rule of King Shaka. Today, they dominate much of Southern Africa and more specifically KwaZulu-Natal. Their art and craftwork include intricate beadwork, pottery and basketry.

XHOSA

Traditional Xhosas indicate their social standing using a complex dress code. For example, a widow wears a long skirt without a slit in front, a marriage bib and two beaded aprons and seniors wear elaborate hats. Their stories are rich with the adventures of ancestral heroes. At home, the men look after the cattle, while the women tend to the crops.

SOTHO

When it comes to finding a partner for life, Sothos often marry their cousins on the maternal side, keeping it in the family. Entering adulthood is a sacred time. This rite of passage involves elaborate celebrations that sometimes last for months. Sothos are talented weavers. They use this skill to create sleeping mats and baskets.

NDEBELE

If you see homes decorated in vibrant geometric prints, you are probably in a Ndebele village. These shapes are inspired by the intricate beadwork they are known for. Traditionally, the women wear neck rings and blankets in striking colours.

SHANGAAN

The Shangaan is of mixed ancestry – Zulu and Tsonga. The tribe originated from Mozambique where one of Shaka's generals settled after fleeing from the King. While in Mozambique, Soshangane's men married the locals before making Mpumalanga their home. Their cultural heritage includes tribal wear from the Zulus and beautiful round huts with patterned thatch roofs from the Tsongas.

VENDA

Mainly based in Limpopo, the Vendas' lifestyle revolves around agriculture. They believe lakes and rivers are sacred, while the Python god controls the rains. When ill, Vendas visit the sangoma, a traditional healer who communicates with the spirits. Polygamy is common, which means men usually have more than one wife.

ENGLISH & AFRIKAANS

The English and Afrikaans cultures were established by the European settlers. They came from a mixed bag of ethnicities, including Dutch, French Huguenots, British and German. Dutch was the official European language. Over time, this developed into the local dialect of Afrikaans. The French Huguenots brought their winemaking skills to the Cape, while the British introduced our public school system and rugby.

INDIAN, CHINESE & CAPE MALAY

People from India and China were brought to South Africa to help establish a colony. Slaves were brought from Madagascar, East Africa and the East Indies. Since Indians worked in the sugar industry in Natal, KwaZulu-Natal remains home to the largest Indian population in South Africa. The Cape Malay culture introduced us to breyani and bobotie. Today, these dishes are firm favourites in kitchens around the country!

Source: showme.co.za

TEST YOUR LOCAL KNOWLEDGE

1. What is reflected on South Africa's currency notes?
2. What is our national animal?
3. Who is our current president?
4. How many languages are there in our national anthem?
5. When did South Africa become a republic?
6. Who discovered the first diamond in South Africa in 1867?
7. Who wrote *Cry the Beloved Country*?
8. Where will you find the Big Hole?
9. Which South African doctor performed the world's first heart transplant?
10. Which city is the judicial capital of South Africa?
11. Who was the first South African in space?
12. What is the name of the longest river in South Africa?

Answers: 1. Big Five animals, 2. Springbok, 3. Cyril Ramaphosa, 4. Five, 5. 1961, 6. Erasmus Jacobs, 7. Alan Paton, 8. Kimberley, 9. Chris Barnard, 10. Bloemfontein, 11. Mark Shuttleworth, 12. Orange River

WORD PUZZLE

Find our 11 official languages hidden in the squares. The words may be found left to right, back to front, upside down or diagonally across.

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

Afrikaans
English
Ndebele
Northern Sotho
Southern Sotho
Swati
Tsonga
Tswana
Venda
Xhosa
Zulu

ADD FLAVOUR TO YOUR STORY

Have you ever heard someone talk about a 'bittersweet experience' and thought 'how can something be bitter and sweet too'? Or how can your neighbour's dog be pretty ugly? These descriptive phrases are called oxymorons.

An oxymoron is a figure of speech made of two or more words that have opposite meanings. Combined they form a juxtaposition, which means they create an interesting contrast. Let's look at an example: jumbo shrimp.

jumbo = big
shrimp = small

We use oxymorons for different reasons. For example, you can add drama to your description by saying your supper was 'disgustingly delicious'. It sounds more interesting than 'really good'!

In your creative writing, an oxymoron can also be used to make your reader laugh or think twice about what you're saying.

CAN YOU IDENTIFY THE OXYMORON?

Underline the oxymoron in each sentence below.

1. Pumsa has a love hate relationship with science.
2. Our teacher is seriously funny.
3. The Winter's Tale from Shakespeare is the perfect example of a tragic comedy.
4. Having polony for lunch is your only choice.
5. The gossip is old news.
6. Stop being such a big baby!
7. It's an open secret that Cliff likes Jemma.
8. Your birthday cake was awfully good.

Answers: 1. love hate; 2. seriously funny; 3. tragic comedy; 4. only choice; 5. old news; 6. big baby; 7. open secret; 8. awfully good

FUN FACT: The word 'oxymoron' is actually an oxymoron! It is derived from Greek – oxys means 'sharp' and moros means 'foolish'.

KNOW YOUR NOUNS

A collective noun refers to a group. Underline the collective noun in each sentence below.

1. A flock of swallows flew over my house.
2. Mom asked me to buy a loaf of bread.
3. We watched a group of dancers perform.
4. The troops returned from the battlefield.
5. We were lucky to see a pride of lions sleeping under the trees.

Answers: 1. flock of swallows; 2. loaf of bread; 3. group of dancers; 4. troops; 5. pride of lions

PAST TENSE VERBS

A past tense verb tells an action that has already happened. Complete each sentence below with the past tense form of the verb in parenthesis.

1. He _____ on his bed. (jump)
2. She _____ in front of the class. (speak)
3. Grandpa _____ his book. (read)
4. The president _____ his speech in front of parliament. (give)
5. The girls _____ to the shops. (walk)

Answers: 1. jumped; 2. spoke; 3. read; 4. gave; 5. walked

All-time Favourites

Reading is a fun way to improve various skills, such as logical thinking and problem solving. The more you read, the more you learn and that's how you grow smarter! These books are loved by children around the world.

HARRY POTTER
By JK Rowling

Harry Potter is a series of fantasy novels that tells the story of a young wizard and his friends who attend Hogwarts School of Witchcraft and Wizardry. In between developing their magic skills and playing Quidditch (similar to hockey, but played on broomsticks), they have to fight trolls, Death Eaters and the biggest villain of all – Lord Voldemort who murdered Harry's parents. Expect many twists and turns!

A SERIES OF UNFORTUNATE EVENTS
By Lemony Snicket

Violet, Klaus and Sunny Baudelaire are left orphaned after a mysterious fire burns down their house. The children are sent to live with a distant cousin, the evil Count Olaf, who tries to steal their inheritance. The series of 13 books is filled with black humour, strange characters and wicked adventures.

WRINKLE IN TIME
By Madeleine L'Engle

Meg and her little brother, Charles, embark on a dangerous journey to save their scientist father from evil forces. They travel through space and time to a new planet with the help of three strange astral travellers known as Mrs Whatsit, Mrs Who and Mrs Which.

MATILDA
By Roald Dahl

This is the unforgettable tale of Matilda, a gifted girl with horrible parents and a terrifying principal. When she discovers that she has the power of telekinesis – the ability to move objects by using the power of her brain – she starts to fight back.

REASON FOR THE SEASONS

While it might sometimes feel like we're experiencing four seasons in one day, it's impossible! Our year is divided into spring, summer, autumn and winter with each season lasting three months.

The seasons play an important role on Earth. In **spring**, the weather is warmer. Nature comes alive with new blooms and baby animals.

Summer brings the hottest temperatures of the year. Heatwaves and drought often cause trouble for all living creatures. Crops are usually harvested at the end of summer.

In **autumn**, temperatures start to drop and plant growth slows down. Animals, like ants, prepare for winter by eating large amounts of food. Leaves change colour and deciduous plants, including trees and shrubs, lose their leaves for winter.

Winter is the coldest season and it snows in many places. Animals find ways to stay warm. For example, arctic foxes grow thick coats, bears go into hibernation (which means their metabolism slows down and they don't move much) and swallows migrate to warmer weather.

But what causes the seasons to change? It all comes down to the Earth's changing relationship to the Sun. Every 365 days, the Earth travels around the Sun. This is called an orbit. Every day, as the Earth moves around the Sun, your location will get a little more or less sunshine, depending on the time of year. This change is the reason for our seasons.

Did you know the Earth is slightly tilted? This means that when it rotates on its axis every 24 hours, it doesn't move in a straight up or down manner relative to the Sun. This tilt affects the Sun's angle to the Earth and the length of our days. This is why seasons north of the Equator are the opposite of seasons south of the Equator. For instance, your pen pal in France will be playing in the snow during Christmas, while you're enjoying a day at the beach!

Source: ducksters.com

QUIZ TIME

1. How often does the Earth orbit the Sun?
2. Which pole is pointed to the sun when the northern hemisphere is experiencing winter?
3. Are the nights longer during the summer or winter?
4. During which season do most plants begin to grow and animals have their babies?

Answers: 1. Every 365 days; 2. South Pole; 3. Winter; 4. Spring

MAKE A THUNDERSTORM

Let's further explore the weather with this fun experiment.

YOU WILL NEED

- A clear, rectangular plastic container
- Red food colouring
- Ice cubes made with blue food colouring

INSTRUCTIONS

1. Fill the plastic container two-thirds full with lukewarm water.
2. Let the water sit for one minute.
3. Place a blue ice cube at one end of the plastic container.
4. Add three drops of red food colouring to the water at the opposite end of the plastic container.
5. See what happens.

RESULTS

The blue and cold water sinks while the red and warm water rises. This happens because of convection. The blue water represents the cold air mass and the red water represents the warm, unstable air mass. A thunderstorm is caused by unstable air and convection plays an important part. A body of warm air is forced to rise by an approaching cold front and that is how thunderstorms form.

Source: weatherwizkids.com

GENERAL KNOWLEDGE

1. In which country is the tallest waterfalls in the world?
2. Which food will never spoil?
3. What is the outer layer of your skin called?
4. What is the biggest part of the brain called?
5. What is the capital city of Afghanistan?
6. What controls how much light passes through the pupil?
7. Which famous physicist wrote "A Brief History of Time"?
8. What is the unit of energy referred to in the equation $E=mc^2$?
9. What is the standard unit of distance in the metric system?
10. What is the official language of Brazil?

Answers: 1. Venezuela, 2. Honey, 3. Epidermis, 4. Cerebrum, 5. Kabul, 6. Iris, 7. Stephen Hawking, 8. Joules, 9. Kilometres, 10. Portuguese

CHOOSE TO BE A BUDDY, NOT A BULLY

Are you being bullied at school? Do you know someone who is being bullied? Bullying can be stopped and even prevented. Learn how to say "NO" to bullying.

WHAT IS BULLYING?

- Calling names
- Teasing
- Stealing
- Intimidating
- Making someone feel inferior
- Putting people down
- Physical violence
- Cyberbullying

IF YOU'RE BEING BULLIED

Take back your power when you come face to face with a bully on the playground. Look the bully in the eyes and calmly say "stop". If joking comes naturally to you, laugh it off. If you don't feel safe enough to speak up, walk away. And stay away. Find an adult to help you put a stop to the bullying. Protect yourself from future bullying by confiding in an adult you trust. Avoid places that are known for bullying.

IF SOMEONE ELSE IS BEING BULLIED

Find an adult you trust to intervene. Be a buddy to the boy or girl who is being bullied. Hang out with him or her at school or on the bus to let them know they're not alone. Find out more about bullying at your school. Think of solutions and share your ideas with the teachers and prefects. Start a school safety committee and use posters to create awareness about bullying. Set an example for your fellow students.

IF YOU'RE THE BULLY

No one has the right to be mean to others. Before you do or say something that could be hurtful, stop and think about the consequences. If you have the urge to be mean, do something else – kick a ball or ride your bike.

Remember everyone is different. Just because someone is not the same as you, doesn't make them better or worse. It just makes them different. Apologise if you've been mean to someone. You and the victim of your bullying will both feel better.

Source: stopbullying.gov

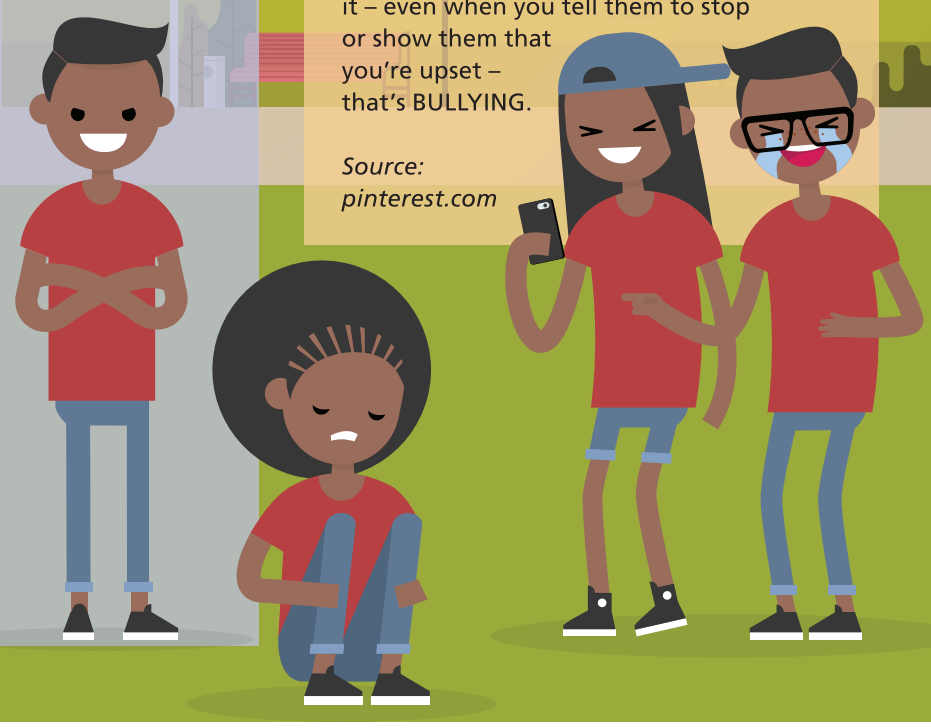
IS IT BULLYING?

When someone says or does something unintentionally hurtful and they do it once, that's RUDE.

When someone says or does something intentionally hurtful and they do it once, that's MEAN.

When someone says or does something intentionally hurtful and they keep doing it – even when you tell them to stop or show them that you're upset – that's BULLYING.

Source: pinterest.com



OUR PLASTIC PLANET

When you look up into the night sky, can you count how many stars are in our galaxy? Probably not. There are too many to see with the naked eye. According to scientists, there are 51 trillion microplastic particles currently floating in our oceans – 500 times more than the stars in the sky!

Every year, more than 8 million tonnes of plastic end up in the sea. By 2050, there will be more plastic in the ocean than fish! By then, most seabirds will know what plastic tastes like. If you eat fish and other animals, you've already tasted plastic!

But if plastic is such a bad thing, why do we have a planet filled with the stuff? Just think about the plastic items you use daily. We all use plastic because it's cheap, durable and keeps our food fresh.

In the last 70 years, we've produced 8.3 billion tonnes of plastic. More than half of this gets thrown away, which means it either ends up on a rubbish dump or in our natural environment.

Thankfully, we can be part of the solution. We can start by using fewer bags, bottles and straws. By organising beach cleanups in our communities, we can raise awareness about ocean pollution. It's important to set a good example for our friends by saying "no" to plastic when we don't really need it.

Can you think of more ways to reduce your plastic use?

_____

_____

_____

_____

_____

_____

Source: independent.co.uk

PROFESSOR THANDI'S FUN SCIENCE EXPERIMENT

WHY YOU CAN FLOAT IN THE DEAD SEA

In this super easy salt water experiment, you're going to learn about the density of salt water versus fresh water.

YOU WILL NEED

- 4 eggs or a number of small grapes
- 4 clear glasses filled with water
- Salt
- Sugar
- Baking soda

INSTRUCTIONS

1. Dissolve two tablespoons of salt in the first glass, two tablespoons of sugar in the second glass and two tablespoons of baking soda in the third glass. Leave the fourth glass as plain water (this is the controlled variable).
2. Label each glass according to the substance you've added.
3. Drop an egg or a number of grapes into each glass. Do the objects float or sink to the bottom?

RESULTS

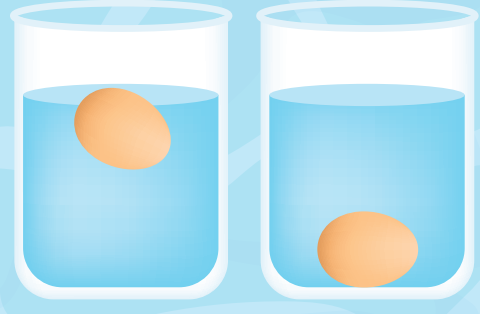
When you add salt to water it creates density, which means it makes the water heavier. This is why many objects will float in salt water but sink in fresh water. People can easily float in the Dead Sea because of the water's high salinity – it's very salty!

Baking soda is a type of salt. This will also make the water denser, causing your objects to float. When baking soda dissolves in water some of it reacts to form carbon dioxide gas.

Look out for the tiny bubbles rising from the bottom of the glass. Over time, the bubbles will attach to the objects and act like a life jacket, carrying the objects to the water's surface.

Sugar also increases the water density.

Source: sciencekiddo.com

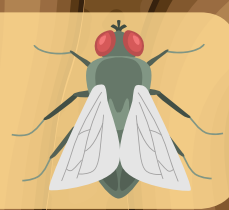


10 SURPRISING BUG FACTS

Have you ever been on a bug safari? You'll be surprised by all the creatures living in your backyard. Grab your sun hat and magnifying glass and go explore! But first, let's look at 10 surprising bug facts.

1. Ladybirds might be small, but they have huge appetites! They can eat more than 5 000 insects in three years.

2. Fruit flies were the first space travellers of the insect kingdom.



3. The phrase 'as busy as a bee' might have originated from the fact that their wings beat 190 times per second. What a buzz!

4. Dragon flies are like the dinosaurs of the insect world. They've been around for 300 million years!

5. Don't even think about doing something behind a caterpillar's back. They have 12 eyes!

6. If you want to avoid mosquitoes, make sure you wash your feet before you climb into bed. They love smelly feet!

7. The ant-eating assassin bug scares predators by piling the bodies of its victims on its back.

8. Can you imagine having taste buds on your feet? Eeeuw! Butterflies do.

9. The water scorpion breathes underwater with a snorkel-like tube attached to its abdomen.

10. Dung beetles are small, but strong. They can drag an object 1 141 times their weight. That's the same as one person dragging 6 double-decker buses filled with people!

Source: natgeokids.com
Image credit: shoeuntied.wordpress.com