
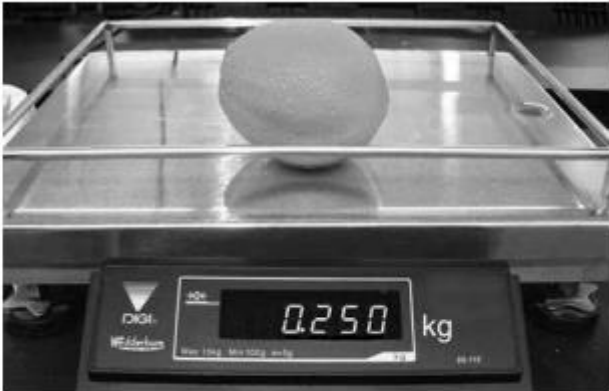


Year 6 Home Booklet 15

Monday

<p>Spelling</p>	<p>Write your spelling words in your book and discuss the meaning of the words with someone.</p> <p><i>Homophones: Words that sound the same but have a different meaning.</i></p> <table border="1" data-bbox="376 376 1492 887"> <tr> <td data-bbox="376 376 751 887"> <p>Red there their buy by bye prey pray</p> </td> <td data-bbox="751 376 1126 887"> <p>Orange break brake heard herd there they're their</p> </td> <td data-bbox="1126 376 1492 887"> <p>Green road rode wore war principle principal sensor censor cymbal symbol</p> </td> </tr> </table>	<p>Red there their buy by bye prey pray</p>	<p>Orange break brake heard herd there they're their</p>	<p>Green road rode wore war principle principal sensor censor cymbal symbol</p>
<p>Red there their buy by bye prey pray</p>	<p>Orange break brake heard herd there they're their</p>	<p>Green road rode wore war principle principal sensor censor cymbal symbol</p>		
<p>Sentence of the day</p>	<p>Learning Intention: → We can edit writing by looking for punctuation, grammar and what's missing.</p> <p>When editing, you are looking for 3 things...</p> <ol style="list-style-type: none"> 1. Punctuation - is the correct punctuation there for that sentence. 2. Grammar - does it make sense? Have the write words been used? 3. Anything to add - is there anything that I have missed, do I need to add anything to get the whole message across? <p><u>Monday</u> and <u>Tuesday</u> are just looking at 1 and 2. <u>Wednesday</u>, <u>Thursday</u> and <u>Friday</u>, you will have to edit and add to what is there!</p> <div data-bbox="370 1588 1394 2078" style="background-color: #c85134; color: white; padding: 10px;"> <p>Monday Learning Intention: We are learning to edit by checking punctuation, grammar and looking for missing information</p> <p>Edit this text:</p> <p>Many people beleive that there might be life on other planets. it is possible that there is water in other parts of the universe. This wood mean that other creatures could definitely survive there. When i grow up I might considor becoming and astonought. then I could find out for certain</p> <div style="border: 1px solid white; padding: 5px; margin-top: 10px;"> <p>Pro Tip:</p> <p>→ Check for one thing at a time:</p> <ol style="list-style-type: none"> 1. Punctuation 2. Grammar 3. Missing Information <p>In this text there are: 4 spelling mistakes 3 capital letters missing 1 comma missing 1 exclamation mark missing</p> <p>Answers on next slide</p> </div> </div>			

<p>Writing</p>	<p>Choose a "native" Australian animal to research -Brainstorm a list of research questions - Think of at least 5-6 questions : flip, extend and ask why</p> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <h2 style="margin: 0;"><u>Informative texts</u></h2> <h3 style="margin: 0;">Plan for Success</h3> <p style="margin: 0;">Brainstorming</p> <p style="margin: 5px 0;">A good informative text tells the reader about their topic. A writer must use research to find this information.</p> <p style="margin: 5px 0;">To find <u>interesting information</u> you must come up with lots of great research questions.</p> <p style="margin: 5px 0;">Make a list of <u>initial questions</u> then flip, extend and ask 'why' to generate more interesting questions.</p> </div> 
<p>Reading</p>	<p>Read for at least 20 mins a book of your choice. After reading: Complete one of the following sentences about what you have just read: Question: "I wonder if..." or "what if..." Connection: "This reminds me of..." Reaction: "WOW, I didn't know that..."</p>
<p>Comprehension</p>	<p>Complete the comprehension pack "The Sun"</p>
<p>Problem Solving</p>	<p>The price of oranges is \$6 per kilogram (kg). The cost of 10 oranges is closest to</p> <ul style="list-style-type: none"> <input type="radio"/> \$6 <input type="radio"/> \$15 <input type="radio"/> \$25 <input type="radio"/> \$60 
<p>Maths</p>	<p>Today for Maths we are looking at the Order of Operations. This means if you have a + and x sign in the same question, how do you know which one to do first?</p> <p>Below is a picture which explains the order in which these operations take place. Some of you may have seen it before and know it as BODMAS</p>

Ordering Mathematical Operations

B	O	D	M	A	S
Brackets (...)	Orders \sqrt{x} x^2	Division \div	Multiplication \times	Addition $+$	Subtraction $-$
1st	2nd	3rd	4th	5th	Last

BODMAS is a useful acronym that tells you the order in which you solve mathematical problems. It's important that you follow the rules of **BODMAS**, because without it your answers can be wrong.

The **BODMAS** acronym is for:

- Brackets (parts of a calculation inside brackets always come first).
- Orders (numbers involving powers or square roots).
- Division.
- Multiplication.
- Addition.
- Subtraction.

Example:

$$4 \times (3 + 2) = ?$$

You need to do the operation, inside the brackets first, $3 + 2$, then multiply the answer by 4.

$$3 + 2 = 5.$$

$$4 \times 5 = 20$$

If you ignored the brackets and did your calculation from left to right $4 \times 3 + 2$ you would get 14. See how the brackets make a difference to the answer.

Example:

$$6 \div 2 + 7 \times 4 = ?$$

You need to do division and multiplication first, but you have one of each.

Start from the left and work across to the right, which means that you start with $6 \div 2 = 3$. Then do the multiplication, $7 \times 4 = 28$.

Your calculation is now $3 + 28$.

Complete the addition calculation to find the answer, **31**.

Example:

$$4 + 6 - 7 + 3 = ?$$

You start on the left and work your way across.

$$4 + 6 = 10$$

$$10 - 7 = 3$$

$$3 + 3 = 6$$

The answer is **6**.

<https://www.skillsyouneed.com/num/bodmas.html>

Try these questions requiring you to use BODMAS

$$1. \quad 3 + 20 \times 3 = \underline{\hspace{2cm}} \qquad 2. \quad 25 - 5 \div (3 + 2) = \underline{\hspace{2cm}}$$

$$3. \quad 10 + 6 \times (1 + 10) = \underline{\hspace{2cm}} \qquad 4. \quad 5 \times (3 + 2) + 7 = \underline{\hspace{2cm}}$$

5. $2 \times (105 + 206) - 550 = \underline{\hspace{2cm}}$ 6. $7 + 7 \times 7 \quad 7 + 7 - 7 = \underline{\hspace{2cm}}$

Remember: If you want more Maths you can always go onto Mathletics and do activities on there as well as what is in your booklets

Other

This week's scavenger hunt
Tick the box and record the result.

Time Scavenger Hunt

- Find something you think is the oldest living thing around you.
- Find the youngest living thing around you.
- Find something eroded by water.
- Find something you think is 100 years old.
- Find something you think is one million years old.
- An example of an animal that lives in an area that has been adapted by man.
- Draw a sketch of what the area looked like before man.

Weekly Chore challenge: Help out around the house once every day.
Record your actions in the space provided. (Examples are; Washing dishes, putting washing away, tidy room, vacuum, take rubbish out etc)

Chore challenge completed _____

Tuesday

Spelling

Write an interesting sentence for each of your spelling words. (You should have written 8 different sentences). Underline the spelling word in each sentence.

Sentence of the day

Tuesday

Learning Intention.

We are learning to edit by checking punctuation, grammar and looking for missing information

Edit this text:

at the end of the crumpled path the two friends came to a stop. they looked down the left fourk, then they looked down the right. Once they had gavered their courage the freinds held hands and started down the left path. they didn't know what was down their, but they were determined to find out

Pro Tip:



→ Check for one thing at a time:

1. Punctuation
2. Grammar
3. Missing Information

In this text there are:

- 4 spelling mistakes
- 3 capital letters missing
- 1 full stop missing
- 2 commas

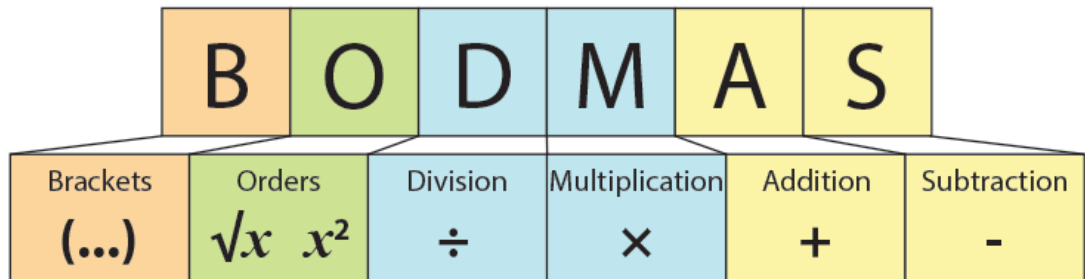
Answers on next slide

<p>Writing</p>	<p>Using the research questions you created yesterday underline the key words, to help you find information to answer each one. Good researchers use a range of sources to find their information . You could use the internet, books, documentaries on TV, ETC.</p> <p>Take notes to help answer each of your questions. Keep your information, you will need it for the rest of the week.</p>
<p>Reading</p>	<p>Read for at least 20 mins a book of your choice</p>
<p>Comprehension</p>	<p><u>Answer these questions based on this picture:</u></p> <ol style="list-style-type: none"> 1. If you could paint a picture that could come alive, what would you paint? 2. Is there anybody on board the ships? 3. Who is controlling them? 4. What is the artist's plan? 5. How do you think they got their power? 6. What other magic might she be capable of performing? 7. Where does she live? What might it be like inside her house? Does she live alone? 
<p>Geography</p>	<p>Bushfires: This week you are going to create an artwork about a bushfire. You can use whatever materials, paper etc around your house or garden but coloured pencils or texta is fine also. There are 3 examples here to give you some inspiration.</p> 
<p>Problem Solving</p>	<p>The Big Pineapple in Queensland is 16m tall. Nina has a real pineapple that is 25 cm tall.</p> <p>About how many times taller is the Big Pineapple than Nina's pineapple?</p> <p> <input type="radio"/> 15 <input type="radio"/> 30 <input type="radio"/> 40 <input type="radio"/> 60 </p>

Maths

Today we are following on from our work with **Order of Operations** using the **BODMAS** Rule to assist us. If you were unable to do yesterday's maths, I recommend you do that today as you will not understand today's maths without it :)

Ordering Mathematical Operations



1 Do the brackets first.

a $(9 - 4) \times 5 =$

c $(6 + 8) \times 5 =$

e $(5 + 7) \times 4 - 10 =$

b $7 \times (5 + 6) =$

d $3 \times (20 - 5) - 9 =$

f $70 - (3 + 8) \times 4 =$

3 Do multiplication and division before addition and subtraction.

a $13 + 7 \times 5 =$

d $6 \times 8 \div 6 + 29 =$

g $7 + 8 \times 5 + 37 =$

b $72 + 88 \div 4 =$

e $42 + 99 \div 3 + 53 =$

h $30 + 85 \div 5 + 27 =$

c $40 - 5 \times 7 =$

f $160 + 40 \div 5 - 27 =$

i $300 - 81 \div 3 + 7 =$

4 Do the bracket work first, then any multiplication and division before adding or subtracting.

a $2 \times (33 + 3) + 27 =$

d $(35 + 7) \times 5 - 35 =$

g $100 - 4 \times (30 - 16) =$

b $37 + 6 \times (12 + 3) =$

e $88 + (7 + 9) \div 4 =$

h $(100 - 37) \times 4 + 7 =$

c $35 + 7 \times 5 - 35 =$

f $3 \times 66 \div 3 + 29 =$

i $110 - 7 + 6 \times (9 + 5) =$

The next questions are quite difficult, you may need a calculator to help you multiply the decimals. If you want a challenge try not to use one :)

5 Complete these fraction and decimal number sentences.

a $4.2 \times 4 + 3 =$ _____

d $\frac{1}{2} \times 30 + 15 =$ _____

g $\frac{1}{5} \times (12 + 8) + 25 =$ _____

b $4.5 + 2 \times 7 =$ _____

e $\frac{1}{3} \times 3 \times 6 =$ _____

h $\frac{1}{8} \times 32 + \frac{1}{4} \times 20 =$ _____

c $6.5 \times 8 - 20 + 4 =$ _____

f $12 + \frac{1}{4} - 5 =$ _____

i $0.5 \times (6 + 12) - 9 =$ _____

Other

Imagine you're a reporter - Write a news report from today?
What is the major event you will write about?

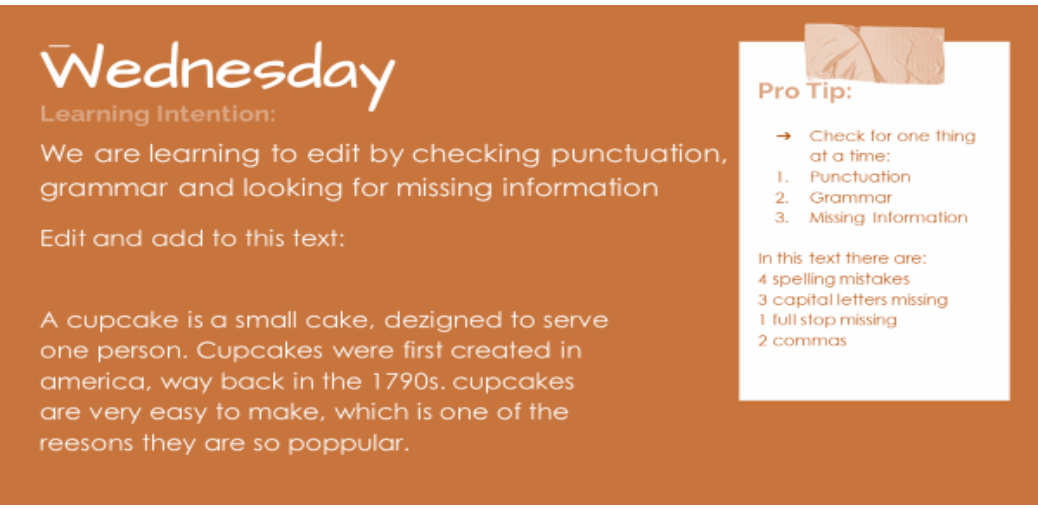
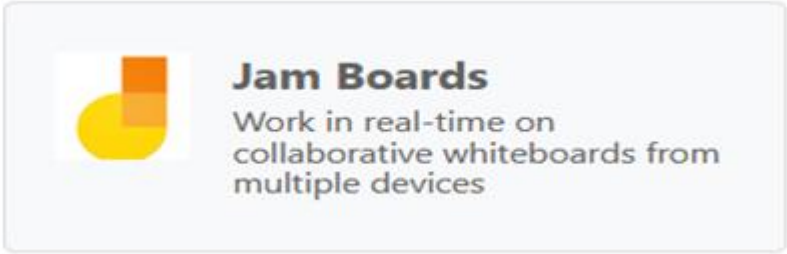
Chore challenge completed _____

Wednesday

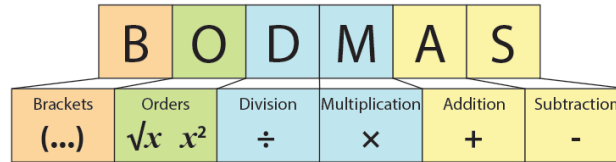
Spelling

Write your spelling words backwards and then forwards.

Example - **ecuas = sauce**

<p>Sentence of the day</p>	 <p>Wednesday Learning Intention: We are learning to edit by checking punctuation, grammar and looking for missing information</p> <p>Edit and add to this text:</p> <p>A cupcake is a small cake, designed to serve one person. Cupcakes were first created in america, way back in the 1790s. cupcakes are very easy to make, which is one of the reasons they are so popular.</p> <p>Pro Tip:</p> <p>→ Check for one thing at a time:</p> <ol style="list-style-type: none"> 1. Punctuation 2. Grammar 3. Missing Information <p>In this text there are: 4 spelling mistakes 3 capital letters missing 1 full stop missing 2 commas</p>
<p>Writing</p>	<p>Using the information you have gathered throughout the week, create a jamboard about the "native" Australian Animal you have chosen.</p> <p>Use your G Suite through your DET Student Log In to find the link to create a Jamboard</p>  <p>Jam Boards Work in real-time on collaborative whiteboards from multiple devices</p>
<p>Reading</p>	<p>Read for at least 20 mins a book of your choice</p>
<p>Comprehension</p>	<p>Read the news article "Fossil of four-legged whale species found in Egypt" and answer these questions:</p> <ol style="list-style-type: none"> 1. How old is the fossil? 2. Who is the Phiomicetus anubis named for? 3. How long ago did ancestors of today's whales evolve from land into marine mammals? 4. Where were the fossil fragments found? 5. Which famous naturalist suggested that a monstrous marine mammal may have evolved from land mammals?
<p>Problem Solving</p>	<p>What is the value of $3 + 6 \div 3 \times 2$?</p>
<p>Maths</p>	<p>Today is our last day using BODMAS. In this lesson we are going to focus on what to do if there are 2 sets of brackets!!! (It might sound hard but it is actually quite easy)</p>

Ordering Mathematical Operations



Warm up:

4 Solve these equations.

- | | |
|--------------------------------------|--|
| a $15 + 21 \div 3 =$ _____ | e $0.5 + 2.5 \times 4 =$ _____ |
| b $5 + 20 \times 4 =$ _____ | f $36 \div 4 + 54 =$ _____ |
| c $8 \times 5 \div 4 =$ _____ | g $30 \times 5 \div 10 =$ _____ |
| d $3.5 \times 2 - 4 =$ _____ | |

When two sets of grouping symbols are used () and [] the innermost symbols must be completed first. = 13 For example $8 + [40 \div (5 + 3)]$

Follow the above instructions to answer these questions:

7 Solve the equations below.

- | | |
|---------------------------------------|---|
| a $100 - [80 \div (6 + 2)] =$ | e $100 - [(3 + 5) \times (6 - 3)] =$ |
| b $80 - [3 \times (12 - 7)] =$ | f $80 - [(7 + 9) \div (6 - 4)] =$ |
| c $7 + [45 \div (27 - 12)] =$ | g $70 - [(13 + 2) \times (7 - 4)] =$ |
| d $13 + [13 \times (3 + 6)] =$ | h $90 + [(14 + 7) \times (20 - 13)] =$ |

Other

Clean up your patch of earth.

Go out for a walk, collect rubbish that has been dropped and put it in the bin. **Don't forget... Gloves and a rubbish bag.**

Chore challenge completed _____

Thursday

Spelling

Write your spelling words in colourful bubble writing.

Sentence of the day

Thursday

Learning Intention:

We are learning to edit by checking punctuation, grammar and looking for missing information


Edit and add to this text:

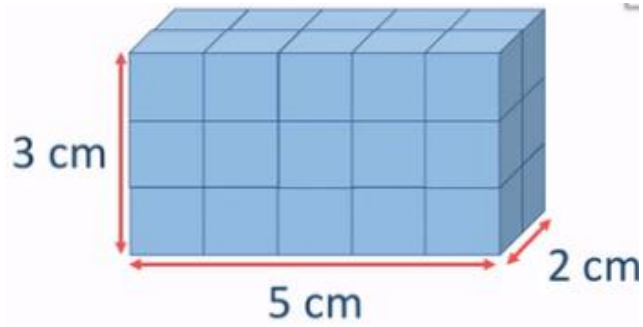
because I was hungry, I made myself a sandwich. Once i had eaten my sandwich, I felt so full of energy. If you want to eat a delicious and healthy lunch, you should defonately try my creation

Pro Tip:

- Check for one thing at a time:
1. Punctuation
 2. Grammar
 3. Missing Information

In this text there are:
4 spelling mistakes
3 capital letters missing
1 full stop missing
2 commas

Writing	<p>Finish off the Jambaord you created yesterday</p> <p>Make sure you have included ;</p> <ul style="list-style-type: none"> - images - answered all of your questions - edited your writing - make sure all information is written in your own words.
Reading	Read for at least 20 mins a book of your choice
Comprehension	<p>Write a summary of your favourite movie. Use these steps to guide you:</p> <div style="border: 2px solid purple; border-radius: 15px; padding: 10px; text-align: center;"> <p>SUMmarise It</p> <p>Shorter than the text</p> <p>Use your own words</p> <p>Main ideas only </p> </div> <p><small>Created by Rachel Lander Copyright ©2010 all rights reserved. http://www.rachel-lander.com</small></p>
Science	See worksheet at end of this document.
Problem Solving	<p>Write your own word problem for this maths equation;</p> $5 \times 6 - 9 + 3 = 24$ <p>If you want to, test out your word problem on someone at home by reading it out to them and see if they can work out the answer (their working out and answer should be the same as the maths equation).</p>
Maths	<p>Today we are looking at measuring the volume of a rectangular prism. Volume is the amount of 3 Dimensional (3D) space a shape takes up.</p> <p>We can work out the volume of a shape by using the formula below:</p> $\text{Volume} = \text{Length} \times \text{Width} \times \text{Height}$ <p>It measures the 3D space because there are 3 dimensions (L, W and H). Because there are 3 dimensions at the end of our answer we write a small 3 behind the units.</p> <p>Let's look at the example below:</p>



Using the formula for volume:

$$\text{Volume} = \text{Length} \times \text{Width} \times \text{Height}$$

$$\text{Volume} = 5\text{cm} \times 2\text{cm} \times 3\text{cm}$$

$$= 30 \text{ cm}^3$$

Use the volume formula above and the table provided to find the volumes of the following shapes:

Shape	Length	Width	Height	Volume
a				cm ³
b				cm ³
c				cm ³
d				cm ³
e				cm ³

Challenge Question: Hint - Look at the title

13 Equal volumes

Prue has finished her model. Matt has only made the base of his model. How high will his model be if he is going to use the same number of cubes as Prue?

Prue's model

Matt's model

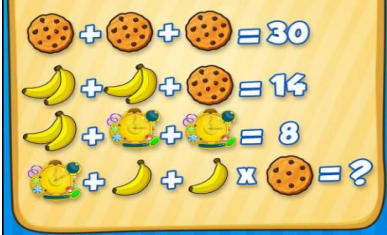
Matt's model will be _____ cubes high.

Other

Draw, paint or make a model
What will the earth look like in 20yrs time?

Chore challenge completed_____

Friday

Spelling	Get someone to test you on your spelling words, or, do a look cover write check with them.
Sentence of the day	<div style="background-color: #c85130; color: white; padding: 10px;"> <h2 style="margin: 0;">Friday</h2> <p style="margin: 0;">Learning Intention:</p> <p style="margin: 0;">We are learning to edit by checking punctuation, grammar and looking for missing information</p> <p style="margin: 0;">Write your own paragraph, with mistakes. Get a friend to correct it. Check your friends' answers.</p> <div style="border: 1px solid white; padding: 5px; margin-top: 10px;"> <p>Pro Tip:</p> <p>→ Check for one thing at a time:</p> <ol style="list-style-type: none"> 1. Punctuation 2. Grammar 3. Missing Information <p>In this text there are:</p> <ul style="list-style-type: none"> 4 spelling mistakes 3 capital letters missing 1 full stop missing 2 commas </div> </div>
Reading	Read for at least 20 mins a book of your choice
Problem Solving	<div style="text-align: center;">  </div> <p>If you still want to do more Maths you can always jump onto Mathletics and complete some activities on there :)</p>
Other	<p style="text-align: center;">Describe the most disgusting food to eat. What is in it? How is it prepared? Write a recipe.</p> <p style="color: blue;">Chore challenge completed _____</p>

When is water not actually water?

What are clouds made of? Use the vocabulary provided to share your ideas in a sentence

Vocabulary

evaporate
condense
melt

freeze
reversible
solid

gas
liquid
states of matter

Response _____

4 Investigation 1: Cooling Down Air

You will need:

- a clean, empty jar or can
- several ice cubes
- salt
- food colouring
- a teaspoon
- a clean tissue or paper towel



Step 1: Collect the materials listed on page 2.

Step 2: Feel the outside of the jar (or can). Write down some words to describe how it feels. Consider:

- Is it warm or cool?
- Is it wet or dry?



Before

Step 3: Place the ice cubes, two teaspoons of salt and a few drops of food colouring into the jar and stir them around. Observe closely for a few minutes.

Step 4: Feel the outside of the jar again. Wrap the tissue around it. Write down some words to describe how it feels now. What substance is on the tissue?

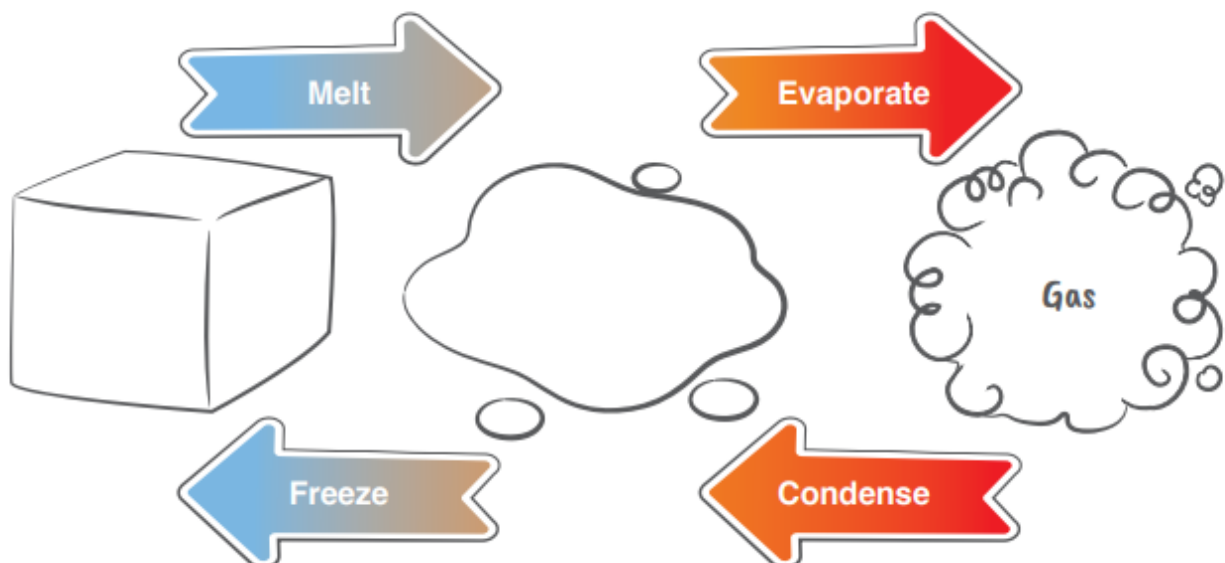


After

The water on the jar in the investigation comes from the air!

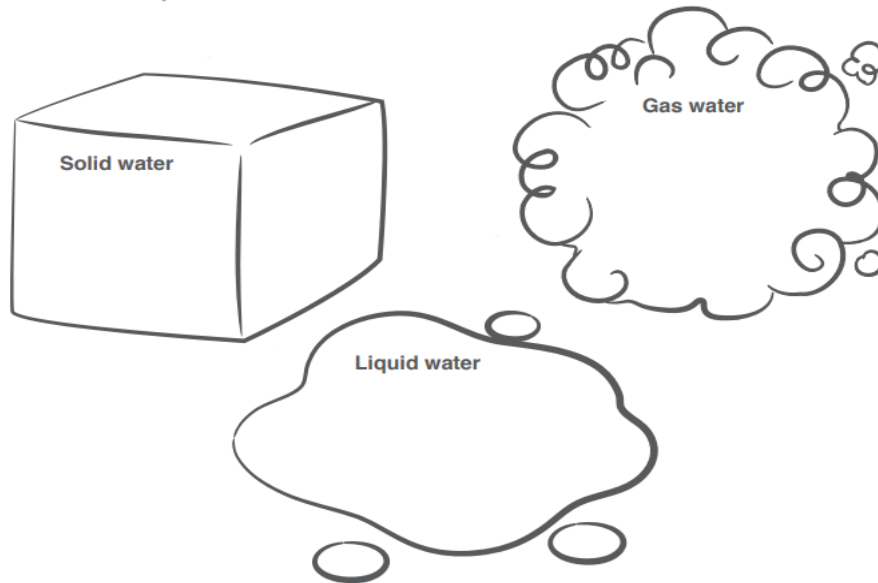
Air contains a small amount of a gas called water vapour. It is the same substance as liquid water. When water vapour in the air outside the jar is cooled by the ice inside, it **changes state** from a gas to a liquid. Gases **condense** into liquids when cooled. We can reverse this change by heating the liquid. It will **evaporate** and become a gas.

States of matter flowchart



Label the missing states of matter in the flow chart above.

We have many different names for the water in our weather.



List different types of weather that has water in these forms

Fossil of four-legged whale species found in Egypt

David Rose, August 30, 2021 6:30PM The Times

Palaeontologists* in Egypt have discovered the 43-million-year-old fossil of a whale species with four legs that would have been capable of walking on land and hunting in water.

The previously unknown species belongs to the Protecetidae, a group of extinct creatures that were part of an evolutionary* change in which mammals went from being land-dwelling herbivores* to sea-dwelling carnivores* over 10 million years.

The 3m-long predator has been named *Phiomicetus anubis* after the ancient Egyptian god of death, not just for its assumed hunting abilities but also because its skull resembles the god's jackal* head.



Weighing about 600kg, it had powerful jaw muscles and amphibious* skills that would have let it prey upon creatures such as crocodiles and small mammals, as well as the calves of other whale species, the researchers said.

"It was a successful, active predator," said Abdullah Gohar, a graduate student of vertebrate* palaeontology at Mansoura University. "I think it was the god of death for most animals that lived alongside it."



*Anubis, the ancient Egyptian god of the underworld, is depicted as having the large ears and pointy head of a jackal.
Picture: Scribe.*

The researchers spent over a decade studying fossilised fragments found in an area in the Fayoum Depression southwest of Cairo that is known as the Valley of the Whales because of the marine fossils unearthed there.

The excavation in 2008 and subsequent study of the creature's skull, jaw, teeth, vertebrae and ribs are particularly significant in Egypt because they mark the first palaeontological discovery by an all-Arab team.

Dr Hesham Sallam, associate professor and founder of the university's vertebrate palaeontology centre, said that *Phiomicetus anubis* "would have had four sturdy legs, not fins, with bones that could have supported its weight to walk on land."

"The attachment between the skull and the mandible (jawbone) are really, really broad, which means that the jaw muscles would be dense and very powerful," Dr Sallam said. "The teeth were also sharp with molars*, which means it was capable of chewing and biting very strongly. It would have been the apex predator* in its environment."

Although today's whales live in the water, their ancestors started out on land and evolved into sea creatures during the Eocene epoch, between 56 million and 33.9 million years ago.

"Over about 10 million years, the ancestors of whales transformed from herbivorous, deer-like, terrestrial* mammals into carnivorous and fully aquatic cetaceans*," the researchers wrote this week in the journal *Proceedings of the Royal Society B*.

Charles Darwin (1809-1892), whose theory of natural selection founded modern evolutionary theory, suggested that a marine creature "as monstrous as a whale" may have evolved from land mammals after noting that bears could swim and feed with their mouths open. He was ridiculed for the suggestion at the time.

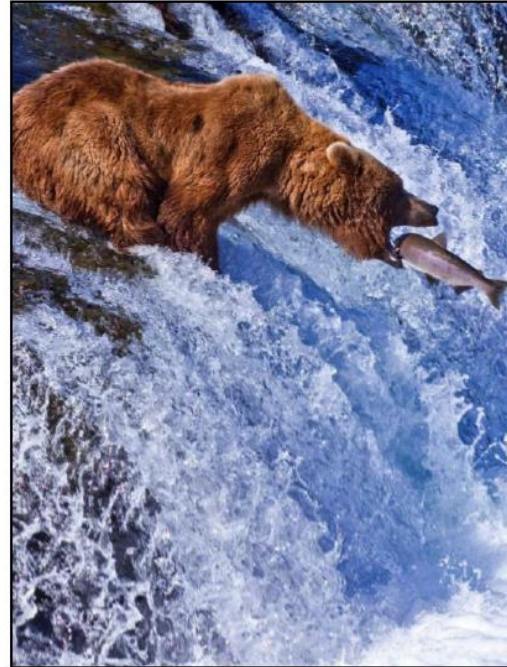
The earliest known whale, the four-legged *Pakicetus attocki*, was a wolf-sized mammal that lived close to water about 50 million years ago in what is now Pakistan. Its closest living relative on land is the hippopotamus.

The discovery of *P. anubis* sheds more light on whale evolution, according to Jonathan Geisler, an associate professor of anatomy at the New York Institute of Technology, who was not involved.

“This fossil really starts to give us a sense of when whales moved out of the Indo-Pakistan ocean region and started dispersing across the world,” Dr Geisler told the website Live Science.



The Fayoum Depression in southwest Cairo is known as the Valley of the Whales because of the marine fossils unearthed there. Picture: file image.



A feast fit for a king – or at least for an apex predator like this grizzly bear. Charles Darwin thought it was possible a huge marine creature may have evolved from land mammals, after observing that bears could swim and feed with their mouths open. Picture: file image.

GLOSSARY

- **palaeontologists:** scientists who study fossils to uncover the history of life on Earth
- **evolutionary:** relating to the gradual development of something
- **herbivores:** animal with a plant-based diet
- **carnivores:** animal with a diet that includes meat
- **jackal:** wild animal of Africa and southern Asia, closely related to a dog
- **amphibious:** suited for both land and water
- **vertebrate:** large group with a backbone or spinal column, including mammals, birds, reptiles, amphibians and fish
- **molars:** teeth for grinding at the rear of a mammal’s mouth
- **apex predator:** the top of the food chain, the alpha or leading predator
- **terrestrial:** of or relating to Earth and its inhabitants
- **cetaceans:** marine mammals, the whale, dolphin and porpoise

The Sun

The Sun is a star and is at the centre of our solar system. That is why it is called a solar system. The word solar means 'relating to the Sun'. The planets in our solar system stay together because the Sun is so big its gravity keeps us all locked in orbit around it.

Making Energy:

The Sun provides almost all the energy, light and heat needed on Earth and it mainly uses hydrogen and helium for this. Energy is made at its core in the centre of the Sun's sphere. Around the core is the radiative zone which carries the energy to the next layer – the convection zone. It takes about 170,000 years for the energy to move from the core to the convection zone! The photosphere is at the Sun's surface and the energy gets to there from the convection zone in large bubbles. From here, the energy escapes (through the chromosphere and corona) and some of it comes to Earth. It takes about 8 minutes for heat to reach us from the Sun.



Did you know?

Surface temperature: 5505°C

Distance to Earth: 149.6 million km

Radius: 696,342 km

Circumference: 4,366,813 km (2,713,406 miles)

Mass: 1,989,000,000,000,000,000,000,000,000kg

(About 1.3 million Earths could fit inside the Sun)

Lifespan:

The Sun is actually a yellow dwarf star and was created about 4.6 billion years ago. The Sun will eventually run out of energy and fade, but don't worry...this won't be for another 4.5 to 5.5 billion years yet! Before the Sun eventually fades, in an unimaginable time from now, it will get bigger and turn into what is called a 'red giant'. In 1.1 billion years from now, the Sun will be 10% brighter than it is today. This will make Earth a bit like a greenhouse – hot and moist. 3.5 billion years from now, it will be even brighter than that at 40% more than it is today. This will be so hot that the oceans will boil and the ice will melt. It's safe to say that there will be no life on Earth by then, but with space travel already making new discoveries and exploring other planets, where do you think humans will be by then?

Questions About The Sun

1. What gases is the Sun mainly made from?

2. How long does it take energy to reach Earth from the Sun?

3. How far away is the Sun from Earth?

4. What type of star is the Sun now?

5. List the different layers of the Sun from the centre to the outside.

6. What keeps our solar system of planets orbiting the Sun?

7. Solar means 'relating to the Sun'. Think of two (or more) examples where we use the word 'solar'.

8. Will the Sun last forever? If not, why not?

9. In the final paragraph it says that Earth will become 'a bit like a greenhouse'. A greenhouse is warm and moist inside because of the glass that lets heat and light in and keeps it in. Our Earth is not surrounded by glass, so what will let the heat and light in and keep it in?

10. Look at the final line - where do **you** think humans will be by then?
