Learning Activities- Stage 2 (18/10 – 22/10)

You will need access to a digital device and help from a parent/carer to complete some of the following activities. If you are unable to access a device, please record and complete work in a notebook/ workbook of your choice. Keep this book at home ready to bring into your teacher when face to face learning resumes. You may also take a photo and email your teacher. Work through what you can and just do your absolute best.

Session	Monday 18/10	Tuesday 19/10	Wednesday 20/10	Thursday 21/10	Friday 22/10
Morning	**Reading** Read Chapter 12 of Misery Guts. You can watch the video with Mrs Cahill or use the PDF. Write 3 – 5 sentences summarising this chapter. What are the main events? How are the characters feeling? What do you predict will happen next?	**Spelling** Sound search activity on Google Classroom (z zz s se si) Spelling Menu – 20 points **Reading** Log on to Reading Eggs and complete 30 minutes of lessons.	**Spelling** Sentences activity on Google Classroom Spelling Menu – 20 points **Reading** Misery Guts - Answer the Chapter 12 comprehension questions, remembering to use full sentences. Feel free to re-read Chapter 12 first to refresh your memory.	**Spelling** Online Sound Waves activities for unit 30 Spelling Menu – 20 points **Reading** Log on to Reading Eggs and complete 30 minutes of lessons.	**Reading** Vocabulary – from the list of words that appeared in Chapter 12, select at least five and use a dictionary to record the definition of and use each word in a sentence.
	10am Zoom				
	Spelling: (z zz s se si) Write you spelling list, do a Look, Cover, Write, Check. Spelling Menu: 20 points	**Writing** Watch the video about dialogue.	**Grammar** Watch the video about subject-verb agreement. Complete the grammar page on subject-verb agreement.	**Writing** Comic strip dialogue activity.	**Writing** Paragraph editing for My Blue Jeans.

	Grammar Watch the video about topic sentences. Complete the grammar page on paragraphs and topic sentences.	Complete the Don't Forget the Quotation Marks task.			**BTN** Watch BTN (Behind the News) and complete the interactive quiz online
Break					
Middle	**Mathematics** **Year 3 and 4** Warm up Task **Year 3** • Unit 27: Multiplication Mental Strategies, p110 **Year 4** • Unit 27: Contracted multiplication pg 110	**Mathematics** **Year 3 and 4** Warm up Task **Year 3** • Unit 27: Division, p111 **Year 4** • Unit 27: Division pg. 111	**Mathematics** **Year 3 and 4** Warm up Task **Year 3** • Unit 27: Giving Directions, p112 **Year 4** • Unit 27: using a Scale pg. 112	**Mathematics** **Year 3 and 4** Warm up Task **Year 3** • Unit 27: Chance – Likelihood, p113 **Year 4** • Unit 27: Chance 113	**Mathematics** **Year 3 and 4** Warm up Task **Year 3** • Shapes as numbers - Investigation 16 **Year 4** Mastery Task 10.
Break					
Afternoon	**Music** Activity from Mr Stevens on Google Classroom.	**Library** Activity from Miss Compton on Google Classroom.	**Science** Watch the video about the Sun. Answer the questions. Read the PowerPoint. Complete the experiment and answer the questions.	**Visual Art** Pop Art Food Posters Please use the supporting document to learn about the Pop Art movement and how to create your very own Pop Art Food Poster!	**PDHPE** Activities from Mr K.

Spelling

Year 3

List Words	Extension Words
zip	advertise
does	apologise
zebra	disguise
these	drizzle
close	exercise
always	hazardous
easy	invisible
use	memorise
used	observe
prize	puzzle
visit	scissors
who's	sneeze
whose	xylophone
fuzzy	zoology
frizzy	zucchini

Year 4

List Words	Extension Words
Zebra	amazement
Those	civilisation
Closed	disguise
Who's	dizziness
Whose	familiarise
Clothes	hazardous
Present	immobilise
Doesn't	memorise
Frozen	otherwise
Music	personalise
Zipper	sneeze
Drizzle	summarise
Horizontal	supervise
Realise	xylophone
organise	zucchini

Weekly Spelling Menu

Complete the spelling pre-test using the video on Google Classroom. Look at the overview to see what spelling activities you should complete on paper or in Google Classroom.

THESE ACTIVITIES ARE WORTH 5 POINTS.

SlOppy MEss! Spell your words in peanut butter, shaving cream, Nutella, etc. - Picture or note required	**ABC Order** abcdefghjklmnopqrstuvwxyz	**Opposite Hand!** Use the hand that you don't normally write with to write your words!
Short Story Use all of your words in a short story.	ALL CAPITAL LETTERS	**Rhymes With** Find words that rhyme with your spelling words

THESE ACTIVITIES ARE WORTH 10 POINTS.

RED AND BLUE Red for CONSONANTS Blue for VOWELS	**Anagram!** See you if you can rearrange the letters of your words to create new words i.e. elbow-below	Fancy FONTS
Pyramid Words t th the	**Type it up!** Use a computer to type up your words in any font you like!	Scrambled Words Write your words, scramble the letters, then write them again.
3 times each 3 times each 3 times each	cut out letters from a magazine and glue to paper to spell out your words	Block Letters
CBA words Write your words forwards and backwards	**Silly Sentences** Use all of your words to create silly sentences.	Word Search Create your own word search using your words. Have someone at home find them all!
PICTURE WORDS Draw a picture and hide your words in the picture.	SECRET AGENT WORDS Number the alphabet 1-26 then create your own secret code!	**RAINBOW words** Write your words in different rainbow colors.

Reading

Monday	**Misery Guts** Read chapter 12 of Misery Guts. You can watch the video with Mrs Cahill or use the PDF on your Google Classroom. Write 3 – 5 sentences summarising this chapter. What happens in this chapter? How are the characters feeling? What do you predict will happen next?
Tuesday	**Reading Eggs** Login to Reading Eggs and complete 30 minutes of your lessons. After that you might like to play some of the fun games!
Wednesday	**Misery Guts** Answer the following Chapter 12 comprehension questions, remembering to use full sentences. Feel free to re-read Chapter 12 first to refresh your memory. **Comprehension Questions** 1. How did Tracy's dad lose his finger? 2. Where did they go for a surprise picnic? 3. Throughout chapters 10-12 Keith has been feeling fearful and worried, but his parents are happy and relaxed. Write a paragraph to try and explain why you think this is the case.
Thursday	**Reading Eggs** Login to Reading Eggs and complete 30 minutes of your lessons. After that you might like to play some of the fun games!
Friday	**Misery Guts – Vocabulary** Here are some words that appeared in Chapter 12. Select at least five words and use a dictionary at home or online to record the definition of the word, and then use each word in a sentence. scab (sore), hammock, ropable, weathered, ruffled, clinking, jagged, swimming trunks, hastily, scorched, tarpaulin, heaved, re-enacted.

12

'You burnt it down?'

Keith sighed.

He'd done that bit about five minutes ago. Some people's powers of concentration were pathetic.

Tracy was staring at him, the scab she'd been picking on her knee totally forgotten. Buster, curled up next to her in the old hammock, was staring at him too.

'I left the fryer on,' said Keith, 'and that burnt it down.'

'Jeez,' said Tracy, 'your parents must have been ropable.'

Keith sighed again. He'd already explained how Mum and Dad had been upset and depressed, and angry if that's what ropable meant.

'That's the whole point,' he said. 'They're happy now and they'll stay happy all the while they think this place is paradise.'

Tracy had gone back to picking her scab.

Great, thought Keith, here am I pouring out my innermost secrets to an almost complete stranger and she's not even listening.

Tracy's mum came out onto the verandah, the weathered old boards creaking under her brown feet. She was holding two cans of drink.

'Guess what Mum,' said Tracy. 'Keith burnt their fish and chip shop in England down.'

Keith sighed.

'I'm sure he didn't mean to,' said Tracy's mum, smiling at Keith. 'Lemonade or Fanta?'

Keith took the lemonade, thanked Tracy's mum and wished it was her who was coming on the picnic.

Tracy's mum went back inside.

When the wire screen door had stopped banging, Keith tried to continue.

'That's why I don't want them to know about the jellyfish and crocodiles and snakes and stuff. That's why we've got to find somewhere for the picnic that doesn't have any of those things.'

He looked up to see if Tracy understood now.

She wasn't even looking at him. She was watching a dusty car pull up next to the house. A man with hair as fair as hers got out of the car with a fishing rod in sections and a bucket.

'G'day Dad,' said Tracy. 'This is Keith. He burnt their fish and chip shop in England down.'

'So,' said Tracy's dad, 'you're the Poms

Trace has been telling us about. G'day.'

He held out his hand and Keith shook it.

Something didn't feel right. Keith realised he was only shaking three fingers and a thumb. There was a finger missing.

Perhaps, thought Keith, Tracy's dad and Buster had a fight and Buster bit off Tracy's dad's finger and Tracy's dad bit off Buster's leg and half his ear.

It didn't seem likely.

He tried not to stare at the missing finger.

'If your dad likes fishing,' Tracy's dad was saying, 'send him round. They're biting real well at the moment.'

He showed them the bucket. Inside were three big pink fish.

'Or snorkelling,' he went on. 'Reef's a knockout if you haven't seen it. Better than telly.'

He ruffled Keith's hair and went inside.

Keith looked at Tracy.

'Do you understand about the picnic now?' he asked.

'He scratched it on some coral when he was seventeen,' said Tracy. 'It got infected and he had to have it chopped off.'

Keith took a deep breath.

'We've got to find somewhere for a picnic,' he said, 'with no crocodiles, no jellyfish, no snakes and no coral.'

The day of the picnic was very hot.

'So where's this surprise destination?' said Dad, locking up the door of the caravan. 'I bet it's the rainforest.'

'Stop it,' said Mum, wedging his new straw hat onto his head, 'it's a surprise. We'll find out when we get there.'

Keith grabbed one handle of Mum's shopping bag and waited for Dad to grab the other.

He wished the day was over and he was in bed.

No such luck.

Dad grabbed the other handle and they started walking towards the road, sandwiches rustling in greaseproof paper and bottles clinking.

'Have you always lived here Tracy?' asked Mum.

'I was born here,' said Tracy. 'Well, not exactly here. We used to live inland a bit, near Crocodile Falls.'

Keith felt the blood drain from most of his body.

'Why's it called Crocodile Falls?' asked Dad.

This is it, thought Keith, in two seconds we'll be running back to the caravan.

'Cause the rocks at the bottom are so jagged,' said Tracy.

Thank God, thought Keith.

'Like teeth,' said Tracy.

Enough, thought Keith, don't go on.

He looked up and saw Tracy giving him a little grin.

They were almost at the beach.

'If we're going to the beach,' said Dad, 'I'll have to go back. I've forgotten my swimming trunks.'

'We're not going to the beach,' said Keith hastily. 'Tracy's got somewhere better.'

'It's along here,' said Tracy.

They walked along the road, past the shop, and kept on going.

'Hope it's not much further,' said Mum. 'It's getting a bit hot.'

'Nearly there,' said Tracy.

Keith had one more go at wishing the day was over and he was in bed.

Still no good.

Tracy led them into the grounds of the Orchid Cove State School. They walked across the dusty playground and past the white wooden school building.

Behind the school was a playing field, mown into an oval and scorched yellow by the sun. In one corner was a metal climbing frame. Tracy stopped next to it.

'Here we are,' she said. 'Don't climb on it, you'll burn your hands.'

'Isn't it a great spot?' said Keith. He unfolded the tarpaulin Tracy's dad had lent them and

heaved it over the top of the climbing frame.

'See,' he said, 'shade twenty-four hours a day.'

He and Tracy crawled inside and started unpacking the picnic things.

Keith risked a glance up at Mum and Dad.

Dad was staring as if he'd never seen a climbing frame with a tarpaulin over it before.

Mum was looking a bit doubtful too. Then suddenly she grinned. And chuckled. And put her arm round Dad.

'They said it'd be a surprise,' she laughed. 'I'm surprised, are you surprised?'

Dad broke into a grin too. 'I'm very surprised,' he said.

Keith felt his heart start to slow down. He wondered if all this stress was going to catch up with him later in life.

Mum and Dad crawled in with them under the tarpaulin and they all ate the sandwiches and drank the fizzy drinks while Tracy explained that this was the place where Russell Kinlock in Year Six had broken the world record for hanging upside down by his legs until a seagull had landed on him and he'd panicked and sprained his pelvis.

Mum and Dad roared with laughter.

Keith was delighted, even though he didn't see what was so funny. He'd sprained his ankle once and it had hurt like anything.

Then Tracy went out onto the oval and re-enacted Orchid Cove State School winning the Far North Queensland Under Twelves Softball Shield.

She did it all in slow motion and had Mum and Dad in stitches.

Keith realised, as he watched her do a slow-motion diving catch, that he'd never met anyone like her before.

Writing

Don't Forget the Quotation Marks!

The sentences in the box below are missing their quotation marks. Re-write the sentences correctly using quotation marks below.

1. Have you seen my red coat? asked George.
2. Time to go to the beach! Dad yelled. Be sure to grab the sunscreen and towels.
3. Peter wondered, How much longer until we have lunch?
4. My birthday party is tomorrow, Jill cheered.
5. Savannah whispered, I am going to go check out my book now.
6. This summer we went to the zoo, said Sam, and we went to visit Grandma.

1	
2	
3	
4	
5	
6	

Comic Strip Dialogue

Read the comic strip with Snoopy (dog), Charlie Brown (boy) and Sally (girl). Write the comic strip as a narrative, using speech marks and punctuation correctly for dialogue.

UNIT 3.3 Text cohesion – paragraphs and topic sentences

It's all about spiders!

Spiders and their close relatives, the scorpions, are called *arachnids*. To some people, spiders can be terrifying creatures. This fear of spiders is called *arachnophobia* (say **uh-rack-nuh-foh-bee-uh**). Let's look at some spiders to see if they deserve their reputation.

Huntsman spiders, although big and hairy, are generally harmless. They are actually more frightened of you than you need to be of them. They will only bite if threatened, preferring to run away. Huntsman spiders are good pest controllers to have around the house as they eat flies, mosquitoes and other nuisance pests.

Not so harmless are the male Sydney funnel-web spider and the female redback spider. Both of these spiders are highly venomous and they are the only Australian spiders known to have caused deaths.

There is no scientific evidence to support the myth that the venom of the daddy-long-legs spider is the most toxic of all spiders. The daddy-long-legs spider's fangs are tiny and are not capable of penetrating human skin.

So, as long as we take sensible precautions like shaking out footwear and clothing before putting it on, there really is no need to fear our eight-legged friends.

Writers use paragraphs to organise information. Paragraphs usually start with a topic sentence to introduce the main point being made in the paragraph. The sentences that follow usually provide us with further details about the topic sentence.

1 Read the report about spiders. There are five paragraphs. Write first, second, third, fourth or last to say which paragraphs match these descriptions.

a I am a paragraph about a spider myth. _____

b I am a paragraph about venomous spiders in Australia. _____

c I am a paragraph about huntsman spiders. _____

d I am the concluding paragraph. _____

e I am the introductory paragraph that classifies spiders. _____

2 Copy the topic sentence from the introductory paragraph that classifies spiders.

_____

_____

_____

3 Write your own paragraph in which the main idea is about sharks or snakes and the starting topic is about the fear of these creatures.

_____

_____

_____

_____

_____

TAKE THE CHALLENGE

Information reports such as this one about spiders often include some technical language or scientific terms. Read the report again and write any words you think are scientific words that could be used about spiders.

_____

_____

UNIT 4.4 Subject–verb agreement

Why the honeybee stings

A tale from Ancient Greece

The honeybee was unhappy. People were stealing her honey. The honeybee thought that all of the honey should be hers. She did not want to share any honey.

The honeybee went to Zeus, who was the chief god. She asked Zeus to give her the power to sting anyone who came near her hive. Zeus granted the honeybee's wish.

However, he was angry that the honeybee would be so mean. Zeus decided to teach her a lesson. He cast a spell that made the honeybee lose her sting when she used it on anyone.

Of course, today we know that honeybees do not only lose their stings when they use them. They also lose their lives.

Every simple sentence has a subject telling who or what the sentence is about. Every simple sentence also has a verb. The subject and verb must agree. For example:
✓ *The honeybee is in the hive.* ✘ *The honeybees are in the hive.*
The second sentence is incorrect. It should be: *The honeybees are in the hive.*

A simple sentence has one main idea or main clause. It always has a subject and a verb or verb group.

1 Read the story on page 62. Write a subject from the box to agree with the bolded verbs in these sentences.

a _____ **was** unhappy.
b _____ **were stealing** honey.
c _____ **would not share** her honey.
d _____ **grants** the honeybee's wish.
e _____ **have** striped bodies.
f _____ **was** angry with the honeybee.
g _____ **was** very mean.
h _____ **know** all about honeybees now.
i _____ **have** a sting on their tail.

Honeybees
The honeybee
Zeus
We
People

2 Circle the verb that agrees correctly with the subject in each of the sentences below.

a The monster **is** / **are** scary.
b Humpty Dumpty **was** / **were** on the wall.
c The honeybee **sting** / **stings**.
d Dogs **bark** / **barks**.
e I **like** / **likes** fish.
f We **has** / **have** a new teacher.
g The ship **is** / **are** at the port.
h They **is** / **are** upset.

3 Underline the subjects in these sentences.

a Tractors pull heavy logs.
b Dad made a billycart for the children.
c Giraffes have long necks.
d The ship sank quickly.

TAKE THE CHALLENGE

Add your own subjects to finish these sentences.

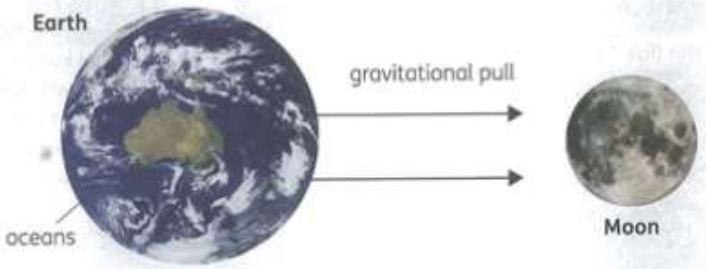
a _____ was sitting at the bus stop waiting patiently.
b _____ barked when the stranger came into the garden.

UNIT 3.4 Text cohesion – paragraphs and topic sentences

Tides

Have you ever battled to get a sandcastle finished at the beach before it is swamped and washed away by a rising tide? We often incorrectly say that tides 'come in' and 'go out' but in fact tides rise and fall. What is it that causes tides to rise and fall?

The Moon is the main culprit responsible for the movement of tides all over Earth. Being the closest body to Earth in space, the Moon exerts a strong gravitational pull on our planet. The gravitational pull of the Moon causes the oceans on Earth to bulge towards it. At the same time, Earth itself turns around the Sun and there is a gravitational pull between them. The constant forces at work in these two orbits mean that when the Moon causes water to bulge towards it on the side of Earth nearest to the Moon, it also causes an equal bulge on the other side. This means, strangely, that when there is a high tide on one side of the planet there is also a high tide on the other side.



Wherever you are on the coast, there will be a high tide every 12 hours and 25 minutes, and therefore two high tides every 24 hours and 50 minutes. This is because Earth rotates a full 360° in 24 hours (that's one complete rotation per day). In the same 24 hours, the Moon rotates 12° around the Earth.

So, to be a successful sandcastle builder, it's best to begin your castle at low tide and finish it within 12 hours and 25 minutes.

We use paragraphs to organise the information we write. A paragraph is a section in a piece of writing that begins on a new line and deals with a single idea or theme. Paragraphs usually start with a topic sentence, which tells us the main point of the paragraph.

1 Number the paragraphs in the information report on page 48 from 1 to 4 so that you can use those numbers to answer the questions that follow.

a Which paragraph tells us what causes tides? _____

b Which paragraph introduces the information report? _____

c Which paragraph explains how often we have high tides? _____

d Which paragraph contains a concluding statement? _____

2 Write the sentence from paragraph 2 that you think is the topic sentence.

_____

_____

_____

_____

CHALLENGE YOURSELF

'Tides' is an explanation. Explanations tell why things happen or how something works or has formed. Explanations are organised into paragraphs. Another type of informative text, an information report, also uses paragraphs to organise information into bundles.

On a separate piece of paper or on a computer, write an information report about an animal of your choice.

Organise your writing into paragraphs that cover these areas:

- Introduce and classify your animal: What kind of animal is it? Which animal family does it belong to? Is it a mammal, a reptile, a bird, a domestic/tame animal?, etc.
- What does it look like?
- Where do you find it?
- What does it eat?
- Your last paragraph should be a concluding statement.

UNIT 4.3 Subject and verb agreement

Occupations

Bakers

The butcher

Pilots

A carpenter

Architects

A jockey

Detectives

Journalists

Florists

An author

Tailors

An astronaut

solve crimes.

fly aeroplanes and helicopters.

bake bread and cakes.

sells meat.

make and alter clothes.

writes books.

rides horses in races.

design buildings.

makes things with wood.

flies into space.

sell flowers.

write for newspapers and magazines.

Do you remember?

The subject of a sentence tells us who or what the sentence is about.

For example: *The birds chattered in the treetops.* (Who chattered? *The birds*)

The verb tells us about the action or feelings in a sentence.

For example: *The birds chattered in the treetops.* (What did the birds do? *Chattered*)

Subjects and verbs in the same sentence must agree.

For example: *Frogs croak.* ✓ *Frog croak.* X *The frog croaks.* ✓ *The frogs croaks.* X
The children are playing. ✓ *The children is playing.* X

1 Use the page opposite to help you write sentences to match the occupations of the people with the jobs they do.

a Bakers _____.
b An author _____.
c Pilots _____.
d A carpenter _____.
e A jockey _____.
f Tailors _____.
g Architects _____.
h Journalists _____.
i Detectives _____.
j The butcher _____.
k An astronaut _____.
l Florists _____.

To agree, a singular subject must take a singular verb, and a plural subject must take a plural verb.
For example: The dog is barking loudly. The dogs are barking loudly.

A helping verb is also called an auxiliary verb.

2 Circle the correct helping verb to agree with the subject in each sentence.

a The cats (is/are) sleeping on the verandah.
b Timmy and Mary-Lou (was/were) running to the train station.
c The red balloon (has/have) popped.

CHALLENGE YOURSELF

On a separate piece of paper or on a computer, rewrite or type the following sentences correctly.

a Sheep was grazing in the paddock.
b The birds is flying north for the winter.
c My team are the best.
d My best friend were waiting at the bus stop.

Editing

Editing

Correctly rewrite the paragraph with all the corrections. Use the answers on the second page to check how you went.

My Blue Jeans

the wind blew my new pair of blue geans into the pear tree in our backyard i knew i shuld have bought them inside last night now my mother only has an hour to sew up the hole so i can wear them to school

Find 3 spelling mistakes.
Add 5 capital letters and 3 full stops.

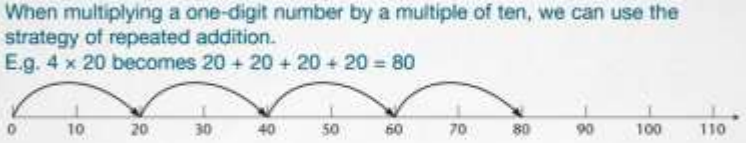
Write the paragraph correctly below:

Year 3 Mathematics

unit 27

Multiplication mental strategies

When multiplying a one-digit number by a multiple of ten, we can use the strategy of repeated addition.
E.g. 4 × 20 becomes 20 + 20 + 20 + 20 = 80



1 Use repeated addition to multiply the numbers. The number line above may assist you.

a	3	×	20	=		g	2	×	30	=	
b	5	×	20	=		h	5	×	30	=	
c	6	×	20	=		i	6	×	30	=	
d	8	×	20	=		j	3	×	40	=	
e	3	×	30	=		k	5	×	40	=	
f	4	×	30	=		l	3	×	50	=	

We can also use place value strategies to multiply by a multiple of 10.
E.g. 4 × 20 becomes 4 × 2 tens = 8 tens = 80.

2 Use this strategy to multiply the numbers below.

a	2	×	50	=		e	9	×	20	=	
b	5	×	50	=		f	6	×	50	=	
c	4	×	50	=		g	4	×	60	=	
d	7	×	20	=		h	5	×	60	=	

3 Write as many multiplication number sentences as you can to create 120.

Represent and solve problems involving multiplication using efficient mental and written strategies and appropriate digital technologies

unit 27

Division

Use the pictures to solve the problems.

4

a How many groups of 5?

b How many groups of 3?

5

a How many groups of 4?

b How many groups of 5?

c How many groups of 10?

d How many groups of 2?

Another method of solving division is to use known table facts, e.g.
20 ÷ 5. Think 4 × 5 = 20, so the answer is 4.

6

a	9 ÷ 3 =	j	15 ÷ 3 =
b	12 ÷ 2 =	k	21 ÷ 3 =
c	16 ÷ 2 =	l	45 ÷ 5 =
d	20 ÷ 2 =	m	35 ÷ 5 =
e	20 ÷ 5 =	n	27 ÷ 3 =
f	15 ÷ 5 =	o	18 ÷ 3 =
g	10 ÷ 5 =	p	24 ÷ 3 =
h	25 ÷ 5 =	q	40 ÷ 5 =
i	12 ÷ 3 =	r	30 ÷ 5 =

7 Discuss in a group how you could solve this problem, then solve it.

At the start of the year Mrs Miller put 32 children into 4 sports teams. How many children in each team?

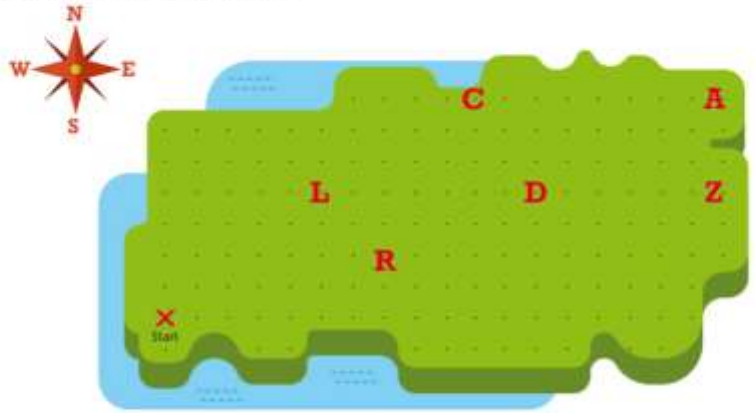
Recall multiplication facts of two, three, five and ten and related division facts

Year 3 Mathematics

unit 27

Giving directions

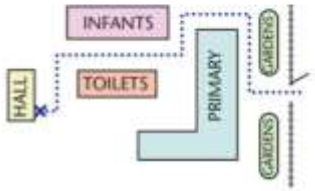
8 Plot the path on the dot paper.



a Start at X, travel north 5 spaces then go east 8 spaces. Travel south 4 spaces and east 8 spaces. Travel north 3 spaces and east 2 spaces. Which letter did you finish at? _____

b Using the dots, draw a more direct path between X and Z.

9 Write a set of instructions to describe the route plotted from the hall to the school gate.

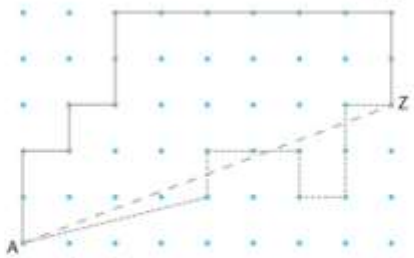


10 Find the shortest and longest paths.

a Use red to colour the shortest path from A to Z.

b Use blue to colour the longest path.

c Explain why the red path is the shortest path.



unit 27

Chance—likelihood

11 Jimmy has a bag of 20 marbles.

a How many of the marbles are red? _____

b How many of the marbles are blue? _____

c How many of the marbles are pink? _____

d How many of the marbles are green? _____

e How many of the marbles are yellow? _____

12 Use the data you have collected above to answer the questions.

a Is it more likely that a red marble will be pulled out of the bag than a green one? _____

b Is it less likely that a green marble will be pulled out of the bag than a yellow one? _____

c Is it more likely that a green marble will be pulled out of the bag than a pink one? _____

13 Mr Brown placed 12 coloured marbles in a bag. He asked each child to select one marble at a time and then to put it back into the bag.
Colour the label which best describes the chance of pulling out each colour.

a Red — Likely / Unlikely / Maybe / Never

b Yellow — Likely / Unlikely / Maybe / Never

c Green — Likely / Unlikely / Maybe / Never

d Orange — Likely / Unlikely / Maybe / Never

14 There are 10 counters in a box. They are made up of three different colours.
The counter that is most likely to be drawn out of the box is green, the least likely colour is red and the colour which has a slightly better chance than red is blue.
Colour the counters to display these chances.

Year 4 Mathematics

unit 27

Contracted multiplication

	Hund	Tens	Ones
		$^{2}5$	3
×			9
	4	7	7

9 × 3 = 27. Write the 7 in the ones column and trade the 2 to the tens column.

9 × 5 tens = 45 plus the 2 tens traded = 47 tens. Write a 7 in the tens column and a 4 in the hundreds column.

1 Solve the multiplications using the contracted form.

	Hund	Tens	Ones	×	
a		2	5	×	3
b		2	7	×	4
c		3	3	×	3
d		4	4	×	5
e		3	6	×	4
f		5	4	×	4
g		3	7	×	5
h		4	5	×	6
i		2	6	×	7
j		1	9	×	8

2 Calculate how much each worker would save.

		Hund Tens Ones			Hund Tens Ones
a	How much would Pedro save in 5 weeks if he saved $27 each week?	×	d	Chloe saved $36 each week for 7 weeks. What are her total savings?	×
		$			$
b	How much would Grace save in 6 weeks if she saved $35 each week?	×	e	If Ji Wu saved $34 each week for 7 weeks, would he have enough to buy a gaming console for $250? Yes / No	×
		$			$
c	Billy saved $45 each week for 5 weeks. What are his total savings?	×	f	If Oscar saved $48 each week for 5 weeks, would he have saved more than Grace? Yes / No	×
		$			$

unit 27

Division

Charles had 65 stamps to share among his 5 children. This is what he did.

65 shared among 5	Share out the tens with each person getting 1.	Trade the 1 ten left for 10 ones. Now share the 15 ones among 5.
5)65	1 5)615	1 3 5)615

3 Solve the divisions.

a 2)32	e 4)56	i 5)75	m 6)72	q 8)96
b 3)42	f 3)45	j 3)75	n 4)68	r 7)91
c 2)52	g 4)52	k 4)64	o 5)80	s 6)84
d 3)72	h 2)72	l 5)70	p 7)84	t 6)90

Sometimes divisions don't work out equally and have **remainders**.
Let's see how Mrs Flockhart shared 73 cakes among 3 classes.

73 shared among 3	Share out the tens with each class getting 2.	Trade the 1 ten left for 10 ones. Now share the 13 ones among 3.
3)73	2 3)713	2 4 r 1 3)713 Answer 24 remainder 1

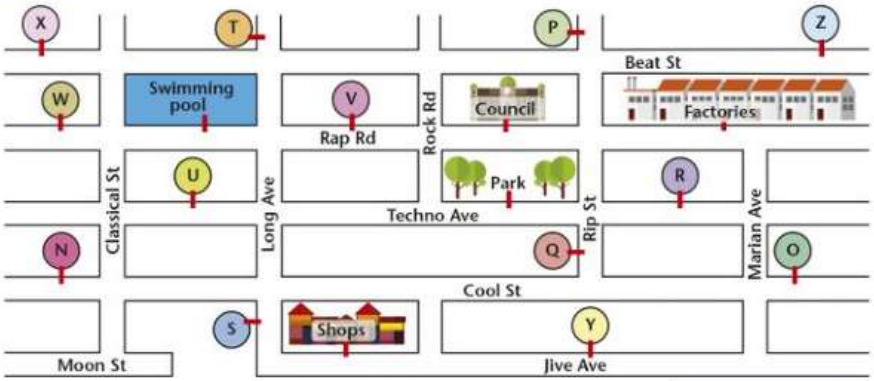
4 Solve the divisions.

a r 3)43	e r 4)54	i r 4)61	m r 5)87	q r 8)97
b r 4)57	f r 3)74	j r 6)81	n r 6)92	r r 5)82
c r 5)66	g r 5)67	k r 6)85	o r 7)86	s r 7)99
d r 6)73	h r 6)79	l r 5)76	p r 4)69	t r 8)95

Year 4 Mathematics

unit 27

Using a scale



Scale: 1 cm = 100 m

5 Use the scale to calculate the distances between the following places:

a	Y to the Shops	____ m	**f**	W to the Council	____ m
b	V to the Swimming pool	____ m	**g**	X to Z	____ m
c	U to R	____ m	**h**	Swimming pool to the Factories	____ m
d	W to V	____ m	**i**	Q to P	____ m
e	S to T	____ m	**j**	N to O	____ m

Trent drew a bird's-eye view of his lounge room.

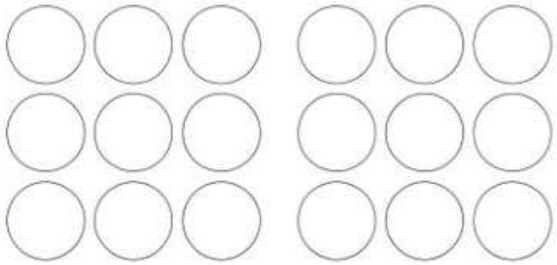
6 Imagine you are looking down on your lounge room from a bird's-eye view and draw a plan view of it. You only need to draw the tops of objects.

unit 27

Chance

7 Wang Wei has three marbles in a bag that are coloured red, yellow and blue. There are six different ways that the marbles can be drawn out of the bag. Colour the marbles to show the possible combinations that he could draw out.

Hint: (R) (Y) (B) is different from (B) (Y) (R)



8 Chantel's class put three different coloured counters in a bag. They drew a counter from the bag, recorded the colour, then replaced it in the bag. They did this ten times.

Red	Yellow	Blue
III	𝍸 I	I

Were the results as you would expect? ____

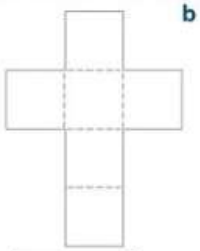
9 Do the same experiment with a bag with marbles and draw the marbles out 40 times. Record your data using tally marks in the table below.

Red	Yellow	Blue

10 If you had a single draw of a coloured marble from the bag, is any one colour more likely to be drawn out than another? ____

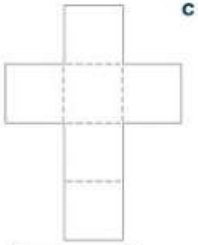
11 The nets of four cubes have been made for a colour game. Colour the faces on the nets to match the chance of that cube showing red.

a



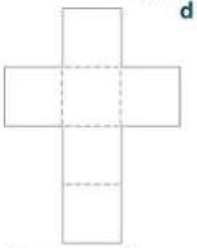
Even

b



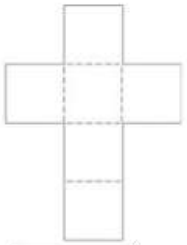
Certain

c



Probably

d



No chance

Optical illusions

There is an old saying that *seeing is believing*. In other words, if you see something, you know it is true. But is seeing really believing? What do you see here? Look at it upside down. What do you see now?

1 An optical illusion is sometimes called a *visual illusion*. An optical illusion happens when your eyes trick your brain.

- **a** Without measuring, which line looks longer: the top line or the bottom line?
- **b** What is the length of the top line?
- **c** What is the length of the bottom line?
- **d** Is this an optical illusion? Give a reason.
- **e** Draw this optical illusion in your book.

2 Sometimes part of our brain sees what is there, but another other part does not. Look at these words. Quickly say the colour of each word but *not* the word itself.

YELLOW BLUE ORANGE BLACK RED GREEN PURPLE

YELLOW BLUE ORANGE BLACK RED GREEN PURPLE

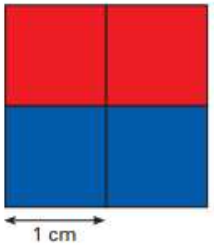
YELLOW BLUE ORANGE BLACK RED GREEN PURPLE

- **a** Write and colour words in a similar way and try the illusion on somebody.
- **b** Why do you think the list is difficult to say?
- **c** Would a similar illusion be possible using digits with a wrong number written inside? Draw large digits from 0 to 9 in random order and write a different number inside many times. Look at the list of digits and try to say the name, not the number written inside it.

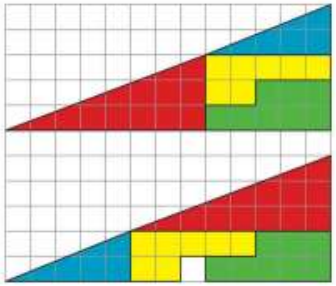
(continued)

3 **a** What is the area of the large square?

b If the square is cut in half and a rectangle is made from the two pieces, what do you notice about the areas of the rectangle and the square?



4 **a** Counting any square more than half-coloured as a full square, and not counting any square less than half-coloured, what is the area of each coloured shape in the top pattern?



- **b** What is the total area of the four coloured shapes in the top pattern?
- **c** What is the total area of the four coloured shapes in the lower pattern?
- **d** Look at the amount of the grid that the top pattern takes up. Then do the same for the bottom pattern. What do you notice about the area taken up by each pattern?

5 See if you can find and draw one or two optical illusions.

Science T4 Science- The Sun, Earth and Moon

Lesson 2: The Sun

Learning intention: to investigate the key feature of the sun.
Success criteria: by the end of the lesson, I have learnt key information about the sun and I have conducted a scientific experiment to help me understand the key feature of the sun.

Complete the following activities:

Watch the following video: https://www.youtube.com/watch?v=RzkJkEKV8Yk

1. In your workbook or the Google document provided, answer the following questions:
- What is the sun?
- What is the sun made of?
- How long does it take light from the sun to reach Earth?
- Write down one more fact about the sun that you found interesting.

2. Open the *Celestial Bodies- The Sun Powerpoint* available on the Google assignment and read slides 5 to 9.
   Display slide 10 and try to answer the true and false questions.
   You can check the answers on slide 11.

3. Read the document: *Science-Experiment-Does the sun produce heat? And conduct the experiment.*

4. In your workbook or the Google document provided, answer the following questions:

    - Which position was the warmest? How do you know?
    - Why do you think this position was the warmest?
    - Was your prediction correct? Why or why not?

Does the Sun Produce Heat?

LOOKING AT THE WORLD

The sun is a star. It is the largest object in our solar system. Through the process of nuclear fusion, the sun produces light energy and heat energy. This energy travels outwards from the surface of the sun towards Earth.

AIM

To investigate if the sun produces heat.

SCIENTIST'S NOTE

You will need to conduct this experiment on a clear, sunny day.

Method

1. Take two of the thermometers and two of the exercise books outside into the playground. Lay one thermometer down on one of the exercise books and place the book in direct sunlight. Lay the other thermometer down on the other exercise book and place the book in the shade.
2. Lay the third thermometer down on the last exercise book and place it somewhere in the classroom that has no access to direct sunlight e.g. a cupboard.
3. Leave the thermometers for at least ten minutes. Once this time has elapsed, measure and record the temperatures on each thermometer.

Equipment

3 x thermometers

3 x identical exercise books

Name _____ Date _____

Does the Sun Produce Heat?

Prediction: (What do you you think will happen during the experiment?)

In the table below, use the numbers 1-3 to label the thermometers in order from warmest to coolest, based on what you think will happen during the experiment.

Thermometer Position	My Prediction
Direct sunlight	
Shade	
No sunlight	

Results: (What happened during the experiment?)

Record the temperatures shown on each thermometer in the table below.

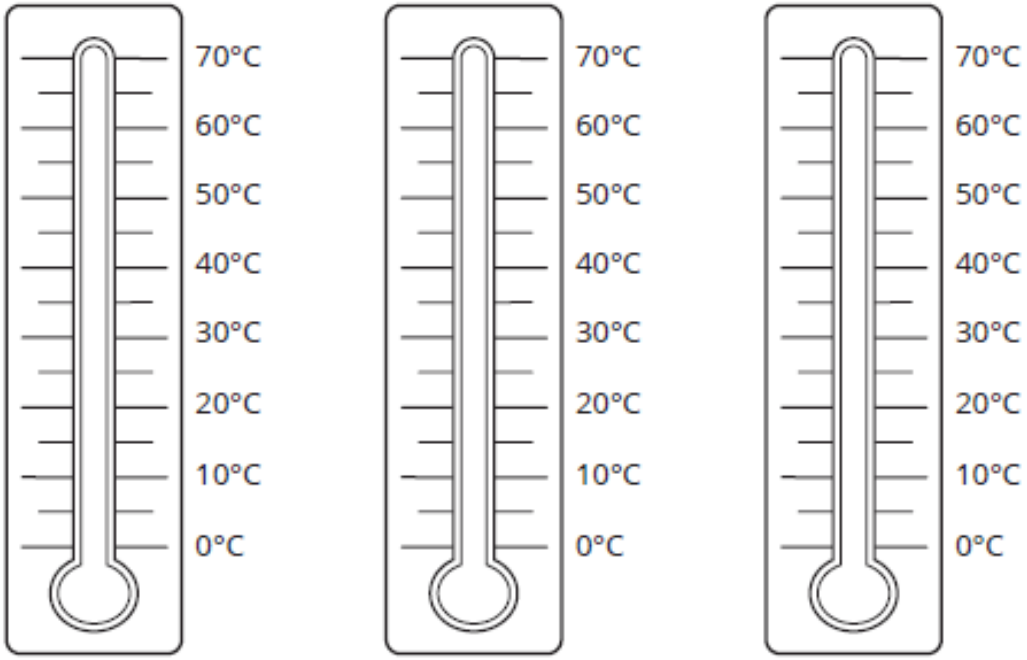
Use the numbers 1-3 to label the thermometers in order from warmest to coolest.

Thermometer Location	Temperature	Order
Direct sunlight		
Shade		
No sunlight		

Does the Sun Produce Heat? - Worksheet

Name _____ **Date** _____

Colour the thermometers below to show the temperatures in each location.



Sunlight Shade No Sunlight

Discussion: (What do your results tell you?)

The thermometer with the highest temperature was in the _____

The thermometer with the lowest temperature was in the _____

This happened because _____

_____

_____

_____

_____

Library

Collecting Memories

Reflecting on the past few weeks of Library lessons, we have been using wonderful literature to help us think about the courage to be kind, valuing ourselves, being resilient and responsible and living together on *This Small Blue Dot*, our precious Earth, which we call home.

We have been thinking about how our words and stories help us feel connected during difficult times.

Very soon, we will all be together again, which is just wonderful!

Your job is to read the text about sea glass, something that was created in tricky circumstances, but has been transformed into something beautiful and precious and then complete the ***Memory Jar*** activity.

This is an opportunity to reflect on the past months of home learning and using your most interesting words and storytelling and drawing skills to create a "memory jar", something also beautiful and precious, just for you.

Sea Glass

One of my favourite things to do is to collect sea glass at the beach. I fill up jars that are scattered about my house. When I see one of my jars I always smile. They remind me of many sunny days and rainy afternoons where I have gone for long walks by the ocean, always a great place to think.

Have you ever heard of sea glass? Sometimes it is known as "beach glass" or "mermaids tears." Sea glass has a beautiful, frosted look.

Where does it come from?

Sea glass is glass that has been dropped in the ocean. It often comes from very old soft drink bottles, but it might come from old dishes or even shipwrecks!

Over time- usually 5 to 50 years- the salt in ocean water as well as the action of the waves, smooths out the rough edges of the broken pieces of glass. They become smooth and rounded and also take on an etched look.

What was once waste has transformed and become prized for its beauty. People collect it as a hobby. Some artists use it to make jewellery or sculptures.

The most common colours of sea glass are clear, brown and green. Sometimes if you are extremely lucky you can come across blue, turquoise, pink and yellow.

Sea glass is not as common as it once was. Thankfully, more people recycle glass rather than just throwing it in the ocean and, sadly, a lot of things that were once made of glass are now made of single use plastics.

Vocabulary:

Etched: a frosty, translucent surfaced

Prized: Valued and desired

Questions and answers:

Question: Does the ocean recycle any other human made materials?

Answer: In general, rubbish dumped in the ocean causes more damage than good. Remember rubbish dumped in the street can end up in drains and find its way to the ocean. Remember, we here at Narraweena are guardians for the ocean just down the hill! What we do matters!

Plastic materials, take hundreds of years to decompose and can cause harm to fish and marine animals. That is why it is so important to dispose of litter properly and recycle glass, paper and plastic.

If you are feeling clever, use the headings to create labels on a real jar and fill it with tiny objects, things that remind you of what is important to you. Maybe a shell or a stone or a leaf or a feather…maybe even a piece of lego. It's up to you!

Music

Week 3		
Get physical	**Lab Rats**	**Movie Buff**
Do something to make your heart rate 'tempo' faster, then follow up with something to make your heart rate 'tempo' slower. Measure your BPM (beats per minute) for each tempo. **Word Wall** Tempo – the speed of a piece of music BPM – beats per minute. To measure this, you need to count how many beats you can fit into 60 seconds. You will need a stopwatch or watch	Use Chrome Music Lab Song-Maker to compose your own piece of music. Choose a tempo (speed), melody sound and percussion sounds (tone colour) and share it with a friend by clicking save. *Optional extension: If you want more advanced settings such as key signature, time signature and more rhythm choice go to 'settings' cog.*	How many movie theme songs can you guess correctly? Make sure you have a pen and paper ready before hitting play (25 total). Take the challenge here

PE

Week 3 challenges	Indoor bowling
Vrikshasana challenge Closing your eyes, make the Vrikshasana (tree pose) stance and see how long you can balance for! Don't forget your other leg! You may like to challenge a parent, carer or sibling. **Burpee challenge** How many burpees can you do in a row before stopping? **The paper challenge** Watch the link below and see if you can complete the paper challenge. https://youtu.be/nAsTpX3rJjk	With a parent or a carer create a level bowling 'lane' in your home for this activity. Collect items to use as pins such as empty water bottles or plastic cups. A small ball such as a tennis ball or a handball works best for indoor bowling. Create a starting line and underarm bowl away. Remember to control your throwing arm and keep your eyes focused on the target. **Enjoy years 3 and 4** 😊