Framework for Learning from Home – Year 5 2021 Week 8
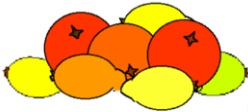
在家学习大纲——2021 年第 5 年第 8 周

对于以下某些练习，你可能需要父母的帮助。完成所以的作业并请父母检查。

For some of the below activities you may need your parents help. Show each completed activity to your parents to check.

	Monday 30th August	Tuesday 31st August	Wednesday 1st Sept.	Thursday 2nd Sept.	Friday 3rd Sept.
Morning 上午	**English 英文** **Viewing/Reading**: have a look at the stimulus below 'Taking Flight' and write down 5 of your noticings. 查看/阅读：查看图片"起飞"，写下你从图片里注意到的 5 个事项。 **Response/ Writing**: Using this story starter for 'Taking Flight, continue the story. Remember to use your 7 Steps for Writing strategies to make your story engaging. 回应/写作：使用这个故事开头来"起飞，接着写故事。记住使用 7 个写作步骤策略来使你的故事引人	**English 英文** **Reading:** 阅读 **Library ZOOM Session** with Mr Philpott Mr Philpott 阅读课 **10 am** – Classes **5D, 5P, 5L and 5J** **5D, 5P, 5L 和 5J 网课** Join Zoom Meeting 链接 https://nsweducation.zoom.us/j/68251668283?pwd=WE00dUY4eEV3enFKeWJ4VGlnQXY1Zz09 **10:30 am** – Classes **5S, 5M and 5K** **5S, 5M and 5K 网课链接** Join Zoom Meeting https://nsweducation.zoom.us/j/68406478658?pwd	**English 英文** **Viewing/Reading :** Read or listen to the news article of the day from 查看/阅读：阅读或收听当天的新闻文章 https://www.kidsnews.com.au/ and complete the quick quiz related to it. Copy and paste the questions into your PowerPoint and complete them. 完成与之相关的快速测验。将问题复制并粘贴到你的 PowerPoint 中并完成它们。 **Response/Writing:** Answer these questions based on the stimulus 'Taking Flight'.	**English 英文** **Viewing/Reading:** Read the poem "Artist Moon" from the August issue of Orbit school magazine. 查看/阅读： 阅读 Orbit 学校杂志 8 月号中的诗歌"艺术家月亮"。 https://drive.google.com/file/d/1ftKwQvrk-Yj_XZsdwZA1KiSt_b6WMlyq/view?usp=sharing **Response/ Writing:** *Read the poem aloud* 回应/写作： 大声朗读这首诗 1.What is the poem talking about?	**English 英文** **Viewing/Reading:** Listen to the Squiz Kids daily podcast: 观看/阅读：收听 Squiz Kids 每日播客 https://www.squizkids.com.au/ **Response/ Writing:** Complete the following activities: 完成以下练习： 1 Write the name of the podcast inc. episode name/number. 2 Write down three facts you learnt from the podcast. 3 Who would you recommend this podcast

NSW GOVERNMENT

入胜。

It was a calm morning. There was but a slight ripple on the surface of the blue water, caused by a whispering westerly wind that whipped across the bay.

A hungry heron hopped happily along a floating log, waiting for its moment to strike. Any second now, it would sink its sharp sabre-like beak into the salty water, hoping to pluck an unsuspecting victim from beneath the surface....

Spelling: Complete one page of Unit 26 below and the online activities for this week's unit.

拼写：完成下面第 26 单元的一页和本周单元的在线练习。

www.soundwaveskids.com.au
Access code: sit815

Extension: Please note, there is an extension word list. Write a paragraph with at least 10 words from this Extension list. Find the

=MHE4dCtOQ2MwV2ozNzdJT1BUN25iZz09
Mr Poulos' Persuasive Writing Lesson: Week 8 Lesson Part 1:MrPoulos'写作
Look at Mr Poulos' PowerPoint and video instructions.
看老师的视频做

Think about the topic:
思考话题：越小越好
Topic: Smaller is Better.

Think of whether you are **FOR** or **AGAINST** this topic, brainstorm ideas you have around this topic.
想想你是赞成还是反对这个话题，围绕这个话题集思广益。

回应/写作：根据图片"起飞"回答这些问题。
1. What can you see happening in the picture?
2. What is it the bird is looking for?
3. What do birds eat?
4. Do all birds eat the same things?
5. Where do you think this bird lives?
6. Do you think it is eating just because it is hungry?
7. What makes this bird such a brilliant predator?

Spelling: complete a task from the spelling grid using this week's soundwaves word list.

拼写：使用本周的声波单词列表完成拼写作业。

Mr Poulos' Persuasive Writing Lesson: Week 8 Lesson Part 2
MrPoulos'写作课 2
Look at Mr Poulos' PowerPoint and video instructions. 看老师视频做
Think about the topic:
Smaller is Better
话题：越小越好

2. What is the moon doing?
3. What human job has the moon been assigned? (Check the title for a clue.)
4. What is the language feature called when we assign human aspects to a nonhuman thing?

It is an extended metaphor poem comparing the moon to an artist and it is now your turn to write a metaphor poem using the template below to help you.

这是一首将月亮与艺术家进行比较的扩展隐喻诗，现在轮到你使用下面的模板来写一首隐喻诗

Spelling: complete a task from the spelling grid using this week's soundwaves word list.

拼写：使用本周的声波单词列表完成拼写作业。

to? Why?
4 Rate this podcast out of 10. Why have you given it this rating?
Soundwaves: Complete one page of Unit 26 below and the online activities for this week's unit.
完成下面第 26 单元的一页和本周单元的在线练习。
www.soundwaveskids.com.au
Access code: sit815

Optional Extension Activity 'Taking Flight'选做题
Can you draw a picture of what it is the bird has spotted underneath the surface of the water?

你能画出那只鸟在水面下发现的是什么吗？

	dictionary meaning of at least 10 words. 扩展 作业：请注意，有一个扩展词列表。从这个扩展列表中写一个至少包含 10 个单词的段落。找出至少 10 个单词的字典含义。		Write an exposition on the topic Smaller is Better. Don't forget to write 5 paragraphs an Introduction, 3 arguments and a conclusion. In your exposition focus on using personal pronoun words (refer to power point). Write your exposition in a word document and upload on Teams. 写一篇关于"越小越好"的说明。 不要忘记写 5 段引言，3 个论点和一个结论。 在你的说明中，重点使用人称代词（请参阅电源点）。 将你的说明写在 Word 文档中并上传到 Teams。		
Break	Break 小憩	Break 小憩	Break 小憩	Break 小憩	Break 小憩
Middle 中段	**Mathematics: 数学** **Mass Focus** Complete the worksheet **Capacity, Volume and Mass.** 完成数学题 **Optional Extension Activity: Oranges and Lemons 选做题** On the table there is a	**Mathematics: 数学** Complete the **HotMaths** activities set by the teacher, including one HotSheet. 完成数学题 **Optional Extension Activity: Watermelon competition 选做题** Here are three	**Mathematics: 数学** **Mass Focus** Complete the worksheet 完成数学题 **Graduated Scales.** Remember to then login to iMaths and look at unit MG3 and look at the consolidation and extension activities. 记住然后登录 iMaths 并查看单元 MG3 并查看合并和扩展练习。 **Optional Extension Activity: What's my**	**Mathematics:数学** Complete the **HotMaths** activities set by the teacher, including one HotSheet. 完成数学练习 **Optional Extension Activity: Terminating Decimals 选做题** *A terminating decimal is a decimal which has a finite number of decimal*	**Mathematics: 数学** **Decimal Focus** Complete the worksheets **Decimal Addition and Subtraction** 完成数学练习 Remember to then login to iMaths and look at unit NA19 and NA21 and look at the consolidation and extension activities.

pile of oranges and lemons that weighs exactly one kilogram. The oranges all weigh 130 grams. The lemons are also all the same weight, which is less than 23 of the weight of an orange.
There are twice as many lemons as oranges in the pile. How many lemons are there and how much does each one weigh?

桌子上有一堆橙子和柠檬，重一公斤。橙子全部重 130 克。柠檬的重量也都相同，不到一个橙子重量的 23。一堆柠檬的数量是橙子的两倍。有多少个柠檬，每个有多少重量？

Wellbeing/P.E- Fitness Aerobics
Watch and follow along to the video below.
Kids Morning Workout - Kids Daily Exercises
Kids Morning Workout - Kids Daily Exercises - YouTube

watermelons. The one in the front of the picture weighs 7.35kg. The one on the left of the picture weighs 8.20kg. The one on the right of the picture weighs 6.45kg. In a melon-growing competition, a melon is awarded a point for each gram that it weighs. How many points does each melon gain? Can you explain how you worked this out?

这是三个西瓜。图片前面的那个重 7.35 公斤。图片左边的那个重 8.20 公斤。图片右边的那个重 6.45 公斤。在瓜类种植比赛中，瓜每重一克就得一分。每个瓜得多少分？
你能解释一下你是如何解决这个问题的吗？

Wellbeing/P.E- Fitness

Weight? 选做题

The picture above shows four equal weights on one side of the scale and an apple on the other side. What can you say that is true about the apple and the weights? If the apple weighs 180*g*, how heavy must one weight be? If the apple weighed 375*g*, how heavy would one weight be? If the apple was a giant one and weighed a full kilo and the weights were each 250*g*, what would the scale look like? How do you know? Can you prove it?

上图显示了秤的一侧有四个相等的重量，另一侧有一个苹果。关于苹果和重量，你能说哪些是正确的？如果苹果重 180 克，那么一个重量必须是多少？如果苹果重 375 克，那么一个重量是多少？如果苹果是一个巨大的苹果，重一公斤，每个重量

places, such as 0.25, 0.047, or 0.7734. Take a look at the fractions below.

$$\frac{2}{3} \quad \frac{4}{5} \quad \frac{17}{50} \quad \frac{3}{16}$$
$$\frac{7}{12} \quad \frac{5}{8} \quad \frac{11}{14} \quad \frac{8}{15}$$

Which ones do you think can be written as a terminating decimal? Once you've made your predictions, convert the fractions to decimals.

你认为哪些可以写成终止小数？做出预测后，将分数转换为小数。

Wellbeing/P.E- Fitness DANCE
Head over to Just Dance and let out some energy by dancing to 'Happy' by Pharrell Williams
https://www.youtube.com/watch?v=sJH4fUzoPKs
Grab some water and find a space free from any hazards when exercising. Have Fun!
运动时多喝水，找一个没有危险的地方锻炼。祝你玩得开心！

记住然后登录 iMaths 并查看单元 NA19 和 NA21 并查看合并和扩展练习。

Creative Arts:美术
Following Book Week, we thought it would be nice for you to draw your favourite book character. You may use any medium you like. Add as much detail and colour as possible. You may like to draw Harry Potter with his scar and round glasses or one of the dragons from 'Wings of Fire'. These are just some suggestions. Make sure you label your drawing with the title of your book and the name of the character you have drawn as well.

Grab some water and find a space free from any hazards when exercising. Have Fun! 运动时多喝水，找一个没有危险的地方锻炼。祝你玩得开心！	**YOGA and Mindfulness with Cosmic Kids: Zen Den – Body Scan** Watch and follow along to the video below. 跟着链接做瑜伽 https://www.youtube.com/watch?v=TCoUnEPeuQk Grab some water and find a space free from any hazards when exercising. Have Fun! 运动时多喝水，找一个没有危险的地方锻炼。祝你玩得开心！	为 250 克，那么秤会是什么样子？你怎么知道？你能证明这个吗？ **Wellbeing Wednesday 12:00 – 2:00pm** **福祉时间** **Try these activities with your family...** Turn off all devices for at least 2 hours 关掉 iPad 两小时 Do a jigsaw puzzle, sudoku or crossword 做拼图游戏		图书周结束后，你可以绘制自己喜欢的图书角色。可以使用任何你喜欢的媒体。添加尽可能多的细节和颜色。你也可能用他的伤疤和圆眼镜来画哈利波特，或者"火之翼"中的一条龙。这些只是一些建议。记住标记你的书名和你画的角色。
Break	Break 午休	Break 午休	Break 午休	Break 午休	Break 午休

After-noon 下午	Science: Gases Matter 科学	BTN: Watch this week's BTN episode 看本周 BTN 视频	Watch something that makes you laugh, then share this with a friend or family member	Geography: Features of Asia 地理：亚洲特点	Activities: 活动
	List down 5 properties of gases on the **Gases Matter worksheet**. Next, complete '**Waterproof paper experiment**'. Make sure to write your prediction, observation and explanation on the sheet.	https://www.abc.net.au/btn/	看一些让你发笑的东西，然后与朋友或家人分享。	Choose one Asian country of focus to study. These include: Japan, Singapore, Papua New Guinea, India, South Korea, Indonesia, Vietnam, Cambodia.	Complete an activity from the "activities and ideas for home for parents of primary learners" sheet on the back page of this booklet.
	You will also need to Conduct the '**Gas in the bag experiment**'using the given worksheet.	Choose a story that is of particular interest to you and complete the story report sheet below.		选择一个亚洲重点国家进行学习。其中包括：日本新加坡、巴布亚新几内亚、印度、韩国、印度尼西亚、越南、柬埔寨。	完成本手册封底的"小学生家长在家的活动和想法"表中的一项活动。
	在 Gases Matter 工作表上列出气体的 5 个属性。接下来，完成"防水纸实验"。确保在表格上写下您的预测、观察和解释。	选择一个你特别感兴趣的故事并完成下面的故事报告表。		You will need to research and use a variety of different maps (topographic, climate, population density) to investigate geographic features, population, climate and economy and currency.	**Catch-up:赶上功课**
					Finish any unfinished tasks from Monday – Thursday 完成一周所以没做完的作业
	您还需要使用给定的工作表进行"袋中气体实验"。		Do 15 minutes of stretching or yoga – eg Cosmic Yoga or Youtube Yoga for Kids 做 15 分钟的伸展运动或瑜伽——例如宇宙瑜伽或 Youtube 儿童瑜伽		**Optional Extension Activity: 选做题 Continue working on ZOO STEM challenge competition:**
	Read the instructions carefully before conducting the experiment. **Write** down what you predict will happen (hypothesis). **Record** all data: times, photos, video etc.		https://www.youtube.com/user/cosmickidsyoga	你需要研究和使用各种不同的地图（地形、气候、人口密度）来调查地理特征、人口、气候以及经济和货币。	**挑战竞赛**
	Write a detailed conclusion to explain the results – you may need to do some research.		https://www.youtube.com/watch?v=X655B4ISakg	You should also include information about the culture (dress, food, traditions, music etc) of your country of choice You will need to present via a PowerPoint or iMovie in Week 10 of Term 3 via class Zoom lessons.	https://taronga.org.au/education/digital-programs-online-resources/enrichment-design-competition
	OPTIONAL EXTENSION AEROGEL Watch the video on Inquisitive: https://www.inquisitive.com/video/1785-aerogel				

			你还要包括有关选择的国家的文化（服饰、食物、传统、音乐等）的信息 你需要在第 3 学期的第 10 周通过 Zoom 课程通过 PowerPoint 或 iMovie 进行演示。	
Aeorgel				

Taking Flight

Unit 26

v ve   vase   sleeve

List Words

grave
victim
solve
survive
advise
advice
lovable
creative
massive
positive
negative
adventure
discoveries
_____

📘 Grapheme Chart

grapheme	word

1 **Colour** the graphemes that represent ◉ v ve in the List Words.

2 **Go** to the List Words for Unit 26. **Count** the sounds and identify all the graphemes in each List Word.

3 **Write** any other letters that can represent ◉ v ve on the Grapheme Chart. **Write** one word example for each.

4 **Write** the words represented by the sound boxes. **Read** the meanings in the box. **Write** the words in the sentences according to their definitions and pronunciations.

★ **Advise** is a verb meaning *to give information or an explanation about what could be done.* **Advice** is a noun meaning *information or an explanation about what could be done.*

[ⅼ] (ⓢ) e r ɑr o r ɑ e i o u | (ⓢ) d dd | ◉ v ve | ⓥ L e y igh i ie | (🐝) z zz s se
[ⅼ] (ⓢ) e r ɑr o r ɑ e i o u | (ⓢ) d dd | ◉ v ve | ⓥ L e y igh i ie | (ⓢ) s ss se ce s c

The inventor gave us _____ on how to make our creation work.

He was also able to _____ us about how to varnish it to protect it.

5 **Write** contractions for the pairs of words, and pairs of words for the contractions.

➤ **Go to Helpful Hint** [10]

we have _____   they have _____   they are _____
have not _____   we had _____   we would _____   we are _____
could've _____   would've _____   should've _____

6 **Write** adjectives ending with the suffix **ive** to match the meanings.

★ The adjective-forming suffix **ive** can mean *relating to,* for example *inventive* means *relating to being an inventor.*

relating to creating _____   relating to a great mass _____
relating to possessing _____   relating to a plus position _____
relating to attracting _____   relating to a minus position _____

7 **Colour** words in the Word Search that have been built from the base words in the box. The Hidden Word has been built from a List Word.

solve – yellow	grave – purple
survive – blue	adventure – red
love – green	discover – brown

t	l	a	v	i	v	r	u	s	g	r	a	v	i	t	y	s
n	v	e	r	u	t	n	e	v	d	a	s	i	m	i	y	o
e	l	o	v	e	l	y	e	v	l	o	s	s	i	d	l	l
v	e	v	l	o	s	e	r	l	o	v	a	b	l	e	e	u
l	c	a	d	v	e	n	t	u	r	o	u	s	t	i	v	t
o	m	i	s	e	i	r	e	v	o	c	s	i	d	s	a	i
s	a	t	a	d	v	e	n	t	u	r	e	i	o	r	o	o
s	o	l	u	b	l	e	r	o	v	i	v	r	u	s	g	n

Hidden Word _____ n

w wh u web whale queen

Grapheme Chart

grapheme	word	grapheme	word

List Words

wheel
waste
worst
forward
weight
nowhere
quest
meanwhile
whistle
twilight
whether
wonderfully

1 **Colour** the graphemes that represent (w wh u) in the List Words.

2 **Go** to the List Words for Unit 26. **Count** the sounds and identify all the graphemes in each List Word.

3 **Write** any other letters that can represent (w wh u) on the Grapheme Chart. **Write** one word example for each.

4 **Write** contractions for the pairs of words in the brackets in the sentences.

This is the worst, wet weather (we have) _____ had this winter. It was wonderfully sunny a while ago. Now this rain has come out of nowhere. We (should have) _____ brought umbrellas. Meanwhile, since (we are) _____ getting wet, (let us) _____ wait in this shop. We (would have) _____ got drenched if (we had) _____ continued outside. I'll ring our parents to see if (they are) _____ able to come for us. If they (can not) _____ , do you know whether (we would) _____ get a taxi at this twilight time of day? Do you have enough money to pay for a taxi because I (have not) _____ ?

Challenge Write homophones to match the clues. **Colour** them in the Word Search to find the hidden message.

1. we will _____
2. part of a car _____
3. mark or swelling on the skin _____

1. part of your body _____
2. use unnecessarily _____

1. stays until something happens _____
2. masses of something _____

1. we are _____
2. what we do with our clothes _____
3. a word that can start a question _____

1. a huge sea mammal _____
2. cry loudly _____

1. another name for Earth _____
2. twirled around _____

1. whinge and .... _____
2. drink made from grapes _____

1. opposite of strong _____
2. seven days make a .... _____

1. a word to describe sunshine, rain, wind _____
2. can often be replaced by the word *if* _____

1. we would _____
2. plant that is a pest _____

1. used to make candles _____
2. hits or smacks _____

w	e	e	d	d	'	e	w	w	h	a	l	e	w	x
r	e	h	t	e	h	w	o	w	a	i	s	t	a	r
w	w	a	i	l	d	d	w	k	e	e	w	w	s	e
e	e	t	s	a	w	e	e	s	a	w	h	i	n	e
a	s	w	e	a	l	l	i	k	d	l	r	o	w	r
t	t	w	c	w	r	r	g	c	w	e	'	l	l	h
h	i	i	w	e	a	i	h	a	i	e	r	e	h	w
e	a	n	z	a	e	h	t	h	a	l	e	e	h	w
r	w	e	r	k	w	w	s	w	w	e	'	r	e	d

Hidden Words _____

w wh u

v ve

grave
victim
solve
survive
advise
advice
lovable
creative
massive
positive
negative
adventure
discoveries
wheel
waste
worst
forward
weight
nowhere
quest
meanwhile
whistle
twilight
whether
wonderfully

Extension List

SXW28

v ve

Word												
evidently												
gravity												
inadvisable												
investigative												
mischievous												
privileged												
rendezvous												
severity												
solvable												
solvent												
souvenir												
sovereign												
survival												
vanquish												
vengeance												
verify												
vigorous												
villainous												
vivacious												
voluntary												

完成下面每一格作业，并写上日期。

Word Work Grid

Complete each of the activities in this grid. Write the date you completed each activity on the line provided.

Syllable Sort	**Odd One Out**	**Wacky Words**	**Word Detective**	**Digging in the Dictionary**
Write your spelling words in order from the least amount of syllables to the most. Words with the same number of syllables should be in alphabetical order.	For each of your spelling words, write four words. One is your spelling word, two relate to your spelling word and one is the odd word out that doesn't fit with the other two.	On a sheet of paper, write your spelling words in different directions, filling up the whole sheet. Use different colours and types of writing for each word.	Write three clues about each of your spelling words. Ask someone to try to guess your spelling words using your clues.	Use a dictionary to find the definition and write a sentence for each of your spelling words.
Date:_____	Date:_____	Date:_____	Date:_____	Date:_____
Rhyming Wheels	**Alliteration**	**Sentence Smart**	**Story Time**	**Sort Them Out**
Think of as many words as you can that rhyme with your spelling words.	Write a sentence for each of your spelling words using as much alliteration as possible.	Write a sentence for each of your spelling words. Date:_____	Write a story using as many of your spelling words as you can. Underline each of your spelling words.	Sort the words on your spelling list into three different categories of your choice.
Date:_____	Date:_____		Date:_____	Date:_____
Word Search	**Handwriting Hero**	**Letter Lingo**	**Words Within Words**	**Code Breaker**
Create your own word search using all the words on your spelling list.	Write out your spelling words in your very best cursive hand writing.	Write a letter to a friend. Use as many spelling words in your letter as you can.	Make a list of as many smaller words as you can find from your spelling list.	Use the code guide to make a code for each of your spelling words.
Date:_____	Date:_____	Date:_____	Date:_____	Date:_____

TeachStarter.com

Framework for teaching (non-digital) – Stage 3 sample

Writing an extended metaphor poem

The poem 'Artist Moon' uses an extended metaphor to compare the Moon to an artist. Write your own poem based on 'Artist Moon' that uses a new extended metaphor to describe the Moon. Start by working through the questions below.

1. In 'Artist Moon', the Moon is compared to an artist who changes the way things look. Brainstorm some other professions that create a piece of work. Some ideas have been provided.

chef   musician   designer   hairdresser

2. Which profession from the above list do you like the most? Now think about what it will help the Moon to create. Write a brief description.

_____

_____

3. Describe what you see when the Moon makes its creation.

_____

_____

4. List any key words you could use in your poem that are related to your metaphor. For example, in 'Artist Moon,' the key words used are painting and night.

_____

5. Use your ideas to draft your poem on a separate sheet of paper. Use the form and structure of 'Artist Moon' as your framework. Don't forget to give your poem a title.

The School Magazine
A world of words since 1916

Maths worksheet 1

MG2 Capacity, volume and mass

Capacity, volume and **mass** are related.
One millilitre of water has a volume of one cubic centimetre and a mass of one gram. Look carefully at the chart below to see other relationships.

Capacity (water)	Volume	Mass
1 mL	1 cm³	1 g
10 mL	10 cm³	10 g
100 mL	100 cm³	100 g
200 mL	200 cm³	200 g
300 mL	300 cm³	300 g
400 mL	400 cm³	400 g
500 mL	500 cm³	500 g
600 mL	600 cm³	600 g
700 mL	700 cm³	700 g
800 mL	800 cm³	800 g
900 mL	900 cm³	900 g
1 Litre (1 L)	1000 cm³	1 kilogram (1 kg)
10 L	10 000 cm³	10 kg
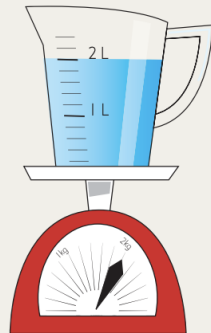
Language reminder

Capacity: the amount a container can hold (use **mL**, **L**).

Volume: the amount of space a 3D shape occupies (use **cm³**, **m³**).

Mass: the amount of matter an object contains (use **mg**, **g**, **kg**, **t**).

Try this

1 Write the related capacity, volume or mass.

a The water in a one litre bottle has a mass of one kilogram. What is the volume of the bottle?

b What is the mass of the water in a full 10 litre bucket?

c Water from a full flask has a mass of 600 g. What is the capacity of the flask?

d What is the capacity of a bucket that can hold 9 kg of water?

e How heavy is the water in a 2 L bottle?

2 Complete the table showing the relationship between capacity, volume and mass of water.

	Capacity (water)	Volume	Mass
a		100 cm³	100 g
b	250 mL	250 cm³	
c	300 mL		300 g
d	500 mL	500 cm³	
e	760 mL	760 cm³	
f		1000 cm³	1 kg
g	2 L		2 kg
h		25 000 cm³	25 kg
i	60 L	60 000 cm³	
j		3500 cm³	3.5 kg

3 Write the corresponding volume, mass and capacity of these liquids.

a
Volume:
Mass:
Capacity:

b
Volume:
Mass:
Capacity:

c
Volume:
Mass:
Capacity:

d
Volume:
Mass:
Capacity:

e
Volume:
Mass:
Capacity:

★ Challenge

A body of water: Scientists have worked out that humans are mostly water, about 70% in fact. That's $\frac{7}{10}$ of your mass made up of water. How much of your mass in kilograms is water?
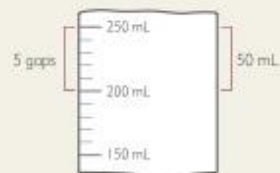
MG3 Graduated scales

On a graduated scale there are times when not all of the graduations are numbered. To work out the value of each graduation, count the gaps between the numbered graduations, then divide.
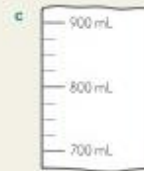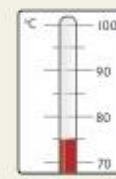
50 mL ÷ 5 gaps, so each graduation is 10 mL.

5 gaps — 250 mL, 200 mL, 150 mL | 50 mL

250 mL ... 200 mL ... 150 mL

Try this

1 Work out the value of each graduation and label the scale completely.

a — 50, 40, 30

b — 80, 60, 100, 40, 120

c — 900 mL, 800 mL, 700 mL

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2 Work out the value of each graduation to help you write the measure shown on these scales.

a 300 mL / 200 mL / 100 mL — [ ] mL
b °C 100 / 90 / 80 / 70 — [ ] °C
c 10 kg / 20 kg / 30 kg — [ ] kg
d 3 cm / 2 cm / 1 cm — [ ] cm

e 0 / 30 / 20 km/h 40 / 10 / 50 — [ ] km/h
f 0 / 750 g / 250 g / 500 g — [ ] g
g 0 Time (s) / 45 / 15 / 30 — [ ] s

h 0 ... 4 ... 8 ... 12 — [ ]
i 0 100 200 300 400 500 600 700 800 900 1000 — [ ]

j 0 ... 10 — [ ]
k 60 ... 70 ... 80 — [ ]
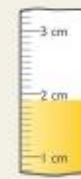
l 0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 — [ ]
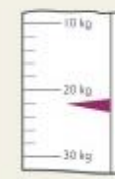
⭐ **Challenge**

More accurate: These two measuring cylinders were used to measure the dose of medicine for a child. Which one would give a more accurate measurement? Why?

40 mL / 30 mL / 20 mL / 10 mL   20 mL / 10 mL

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Topic MG3

NA19 Decimal addition to hundredths

When adding decimal fractions it is important to keep the decimal points lined up. This will help you add the ones, tenths and hundredths in their correct columns.

```
  6.21          6.21
  0.54          0.54
+ 1.3        + 1.30
             ─────
               8.05
```

Tip
Fill the empty places with zeros. This keeps the digits lined up.

To make sure your answer is reasonable, estimate your answer by rounding to the nearest whole number and add. You can usually do this mentally.

```
6.21 round down        6
0.54 round up          1
+ 1.3 round down     + 1
                    ─────
                       8  (estimate)
```

You can also use a calculator to check your answer.

Try this

1 Estimate, then write each sum vertically and add.

a 7.05 + 1.3 + 8.14   b 3.02 + 0.5 + 4.19   c 22.43 + 17.09   d 9.47 + 9.47

(estimate)   (estimate)   (estimate)   (estimate)

e 0.8 + 1.5 + 0.4   f 2.02 + 0.2 + 20   g 9.9 + 9.09 + 9.99   h 0.5 + 5 + 5.5

(estimate)   (estimate)   (estimate)   (estimate)

What can cut down on homework pollution?

2 Solve the additions, then write the letter that matches each answer in the boxes below.

67.23 + 0.42 + 2.07   7.17 + 7.28 + 7.1   7.52 + 1.83 + 0.04   0.1 + 1.1 + 0.01   7.3 + 3.7

(A)   (I)   (U)   (C)   (S)

508.15 + 281.22   0.48 + 0.66 + 0.74   7.08 + 7.06   32.03 + 1.2 + 0.1   5.55 + 5.5

(D)   (N)   (P)   (E)   (L)

9.39	1.88	11.05	33.33	69.72	789.37	33.33	789.37		14.14	33.33	1.88	1.21	21.55	11.05	11

3 Our relay teams ran in the 4 x 100 m at the District Athletics Championships. Each competitor's time for their leg of the race is recorded below. What was the total time for each race?

Boys 4 x 100 m relay times	
Ben	15.01 s
Ethan	13.12 s
Austin	14.5 s
Harper	14.22 s

Girls 4 x 100 m relay times	
Olivia	14.48 s
Ella	13.56 s
Amber	16.28 s
Harmony	14.77 s

★ Challenge

Dream team: Choose the fastest four from the eight boys and girls above to make a mixed relay team. What would their 4 x 100 m time be?

Topic NA19

NA21 Decimal subtraction to hundredths

When you subtract decimal fractions, remember to keep the decimal points lined up vertically. This will make sure that you subtract the ones, tenths and hundredths in their correct columns.

$$\begin{array}{r} 86.46 \\ -\ 25.7 \\ \hline \end{array}$$

$$\begin{array}{r} {}^{5\ 14} \\ 86.46 \\ -\ 25.70 \\ \hline 60.76 \end{array}$$

Tip

Fill the empty places with zeros. This also keeps the digits lined up.

To make sure your answer is reasonable, estimate your answer by rounding to the nearest whole number and subtract. You can usually do this mentally.

$$\begin{array}{r} 86.46 \text{ round down} \\ -\ 25.70 \text{ round up} \\ \hline \end{array}$$

$$\begin{array}{r} 86 \\ -\ 26 \\ \hline 60 \text{ (estimate)} \end{array}$$

You can also use a calculator to check your answer.

Try this

1 Estimate, then write each subtraction vertically and subtract.

a 56.41 − 3.29

b 77.25 − 72.6

c 22.43 − 17.09

(estimate)   (estimate)   (estimate)

d 16.7 − 11.46

e 9.9 − 9.47

f 518.41 − 8.41

(estimate)   (estimate)   (estimate)

2 The table shows the life expectancy at birth from ten countries around the world. Work out the difference in life expectancy of the children born in the following pairs of countries.

a Monaco and Australia

b Australia and USA

c Australia and Chad

d China and India

e Australia and South Africa

f Monaco and Chad

Life expectancy at birth		
Rank	Country	Years
1	Monaco	89.52
2	Japan	84.74
13	Australia	82.15
43	USA	79.68
99	China	75.41
153	Russia	70.47
163	India	68.13
191	South Africa	62.34
222	Afghanistan	50.87
224	Chad	49.81

Source: The World Factbook.

3 Use the Boys 4 × 100 m relay times on page 69 to answer these questions.

a Who ran faster, Ethan or Harper? What is the difference between their times?

b Who ran faster, Ben or Austin? What is the difference between their times?

4 Use the Girls 4 × 100 m relay times on page 69 to answer these questions.

a Sort the four competitor times from fastest to slowest.

b What is the difference between the time of the fastest girl in the relay team and slowest?

Challenge

What was the question? The answer to a decimal subtraction is 9.09. Write three possible questions that would give this answer.

Topic NA21

What countries are there on the continent of Asia?

1 Colour and label each of the continents on the world map below. Add in the North Point, a legend and a title for the map.

Legend

Asia is the largest continent in the world, covering approximately thirty percent of the earth's surface. Asia has the greatest population of all the continents. Over four billion people across more than forty countries live here. Asia has a variety of geographical features including mountains, plateaus, plains and deserts as well as freshwater and saltwater environments.

2 Write down the names of any Asian countries you have heard of or have visited.

3 Use the detective cards below to race your way around Asia.

Working in pairs, read the clues on each card to work out which Asian country it relates to. Find this country on the map of Asia on the following page. Label and colour this country.

Forty five billion pairs of chopsticks made each year.

Black sand desert

An island.
Sits on the 80 degrees east longitude line.

An archipelago.
Four main islands.
More than 6,000 small islands.
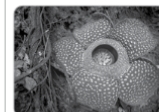
Flag features a crescent and a star.

Tallest building in the world.

No chewing gum.

Hills made of chocolate.

Has the most rivers in the world.

Bengal tiger

Longest capital city name in the world.

4   Look at the list of Asian countries below. Use an atlas to help you find one country from each region and then colour and label it on the map.

Countries of Asia

North-east	South-east	South	Central	West		
China	Brunei	Afghanistan	Kazakhstan	Armenia		
Japan	Cambodia	Bangladesh	Kyrgyzstan	Azerbaijan		
Mongolia	Timor-Leste	Bhutan	Tajikistan	Bahrain		
North Korea	Indonesia	India	Turkmenistan	Cyprus		
South Korea	Laos	Iran	Uzbekistan	Georgia		
Taiwan	Malaysia	Maldives		Iraq		
Russia	Myanmar	Nepal		Israel	Palestine	Turkey
	Philippines	Pakistan		Jordan	Qatar	United
	Singapore	Sri Lanka		Kuwait	Saudia	Arab
	Thailand			Lebanon	Arabia	Emerites
	Vietnam			Oman	Syria	Yemen

5   Find some interesting facts about four countries in Asia and make detective cards for them. Share your card clues with a partner and see how quickly they can find the matching countries.

6

a Open Google Earth and find the Early Connectors section. (To do this, Select the Voyager icon then select Education, then scroll down to Explorers: Early Connectors).

Choose either Marco Polo, Ibn Battuta or Zheng He. Follow and investigate their exploration of parts of Asia.

b Make your own fact file about their journey. Include geographical features and places they came across along the way.

Gases Matter

The Properties of Gases

Air is a mixture of gases, mostly nitrogen and oxygen. Like solids and liquids, gases are matter. We can identify gases by their properties and their behaviour.

List the properties of gases in the balloons below.
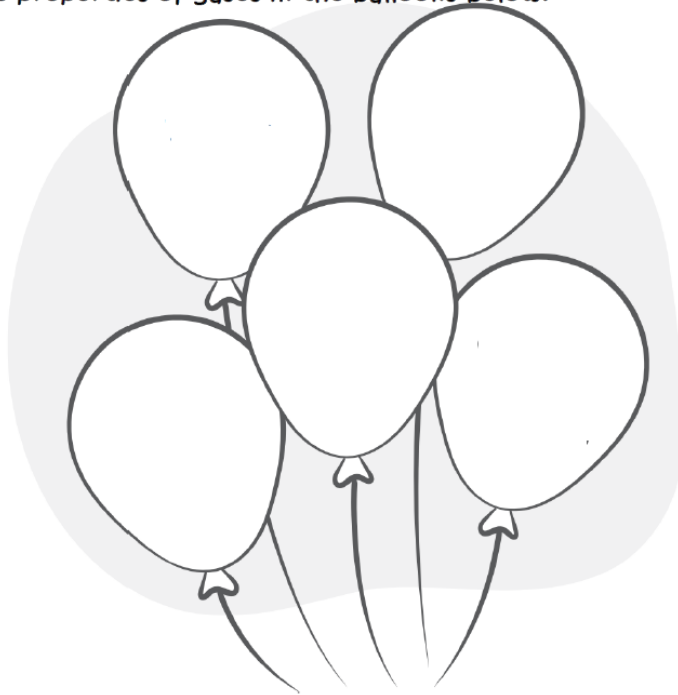
INVESTIGATION QUESTION 5

Waterproof Paper

Each group will need:

- 1 clear plastic cup
- tissue or a piece of paper towel
- sticky tape
- 1 large, deep bowl full of water (preferably clear)

---

5 **Investigation: Waterproof Paper**

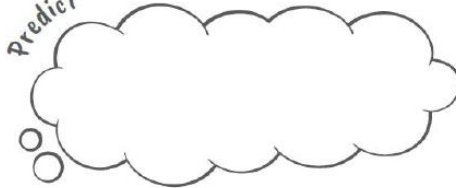**Step 1:** Collect the materials listed on page 1

Step 2: Scrunch up the tissue/paper towel and wedge it into the bottom of the cup. You could use a small amount of tape to hold it in place.

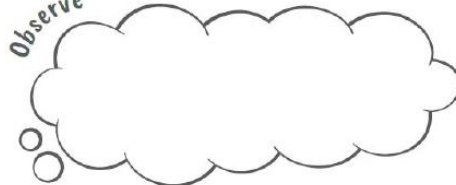**Step 3:** Hold the cup upside down over the water.

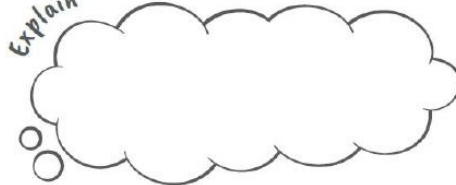What will happen to the paper if you lower the cup down into the water? Write your **prediction**.

Predict

Step 4: Lower it quickly down to the bottom of the bowl. What happens to the paper? Write your **observation**.

Observe

Step 5: Lift the cup straight up out of the water. Dry around the edge, then feel the paper. Write an **explanation** for what you observed and felt.

Explain

What property of gases does this investigation demonstrate?

_____

Step 6: Repeat steps 3–5. Holding the cup at the bottom, tilt it by lifting up one side until you hear a sound. What makes that sound? Discuss some ideas with a partner.

Experiment in a bag

A Gas Bag

You will need:

- 1 small ziplock bag (snack size)
- 1 cup of vinegar
- baking soda
- 1 teaspoon

- Read the instructions carefully before conducting the experiment.
- Write down what you predict will happen (hypothesis).
- Record all data: times, photos, video, etc.
- Write a detailed conclusion to explain the results – you may need to do some research.

Gas in a Bag Experiment

Aim
Will water temperature affect how fast the bag inflates?

Equipment
- One small (sandwich size) zip-lock bag   - Bicarbonate of soda   - Warm water, tap water, cold water   - Vinegar   - Measuring cup   - A tissue

Method
1. Put 1/4 cup of very cold, tap or very warm water into the bag. 2. Add 1/2 cup of vinegar to the water in the bag. 3. Put 3 teaspoons of bicarbonate of soda into the middle of the tissue. 4. Wrap the bicarbonate of soda up in the tissue by folding the tissue around it. 5. You will have to work fast now – partially zip the bag closed but leave enough space to add the bicarbonate of soda packet. Put the tissue with the bicarbonate of soda into the bag and quickly zip the bag completely closed. Start your timer as soon as the bag is zipped. 6. Put the bag down on the ground (outside) and step back. The bag will start to expand, and expand, and if all goes well...POP!

A fair test

Controls	Variable

Hypothesis (predict what you think will happen)

Results – data /observations (photos)

Conclusion

STORY REPORT

RATE THE STORY OUT OF 5 STARS

☆ ☆ ☆ ☆ ☆

STORY TITLE:

NEWS

STORY LENGTH:

PURPOSE OF THE STORY: *CIRCLE THE AUTHOR'S PURPOSE*

ENTERTAIN   PERSUADE   INFORM

EXPLAIN   DESCRIBE

REPORTER:

REPORTERS OFTEN QUOTE OR INTERVIEW EXPERTS

NAME THE EXPERTS IN THIS STORY & SUMMARISE THEIR KEY POINTS

STORY TOPIC:

STORIES CAN BE CATEGORISED INTO TOPICS OR SUBJECTS

DIGITAL TECHNOLOGY & STEM	NATURAL DISASTERS	ENVIRONMENTAL ISSUES
AUSTRALIAN HISTORY	WAR HISTORY	SUSTAINABILITY
ANIMALS	GLOBAL CITIZENSHIP	INDIGENOUS CULTURE
HEALTH & WELLBEING	SPACE / SCIENCE	BELIEFS & FESTIVALS

COLOUR THE BOX (OR BOXES) TO SHOW HOW THIS STORY COULD BE CATERGORISED

STORY SUMMARY:

A QUESTION I HAVE:

?

EMOTIONS:

STORIES CAN EVOKE EMOTION. HOW DID THIS STORY MAKE YOU FEEL?

DRAW AN EMOJI

VISUAL TEXT ELEMENTS USED IN THIS STORY: *FILL THE TABLE WITH A ✓ OR A ✗*

	INTERVIEWS		PHOTOGRAPHS
	STILL IMAGES		MOVING IMAGES
	CAPTIONS		CHARTS
	ANIMATIONS		DIAGRAMS
	TABLES		MAPS

TWO THINGS I LEARNT FROM THIS STORY:

1

2

BTN
BEHIND THE NEWS