

**Blue Class – Home Learning – w.b. 15<sup>th</sup> June 2020**

Dear Parents / Carers,

Another week has flown by and I have to say thank you to all of you who have sent in work and photographs showing what the children have been doing, it's great to see what you have all been up to.

I have prepared a new plan for this week and attached some resources to this plan but I have also put some resources and worksheets on to Purple Mash. Any of you that are accessing the white rose maths as part of the home learning, will notice that they are no longer offering free worksheets. However there is a short video to remind the children of how to work out the answers then you can either use the activity sheets attached to my plan or click on bbc bitesize and follow the daily lessons there.

Please remember that this plan is meant as a guide and you should work with your children at their pace. This may mean that they do not complete all the tasks or you may decide to spend longer on one particular skill but that is absolutely fine as long as they understand what they are doing. As usual, please feel free to e-mail [blue@beaupre.cambs.sch.uk](mailto:blue@beaupre.cambs.sch.uk) if you have any questions.

Keep looking after yourselves and don't forget to carry on sending in the photos for the newsletter, they are greatly appreciated by everybody.

Miss Carpenter

Task	English - Reading	English - Writing	Maths
1	<p>This week you can either choose one of your own books to read throughout the week or you can go onto purple mash, click on the black home tab. Select serial mash then choose a book to read. There are quizzes for you to complete when you have read the book.</p>	<p>This week we are going to go back to looking at some of our core skills for writing so for each task we will focus on a particular area of grammar.</p> <p><b>Task 1</b></p> <p>For this first task we are looking at different types of verbs. Remember that a verb is a word that describes an action, state or occurrence.</p> <p>E.g.</p> <p>Verbs can be used to describe an action, that's doing something. For example, like the word 'jumping' in this sentence:</p> <p>The rabbit was <u>jumping</u> in the field.</p> <p>They can also be used to describe a state of being, that's feeling something. For example, the word 'likes' here:</p> <p>The monster <u>likes</u> rollercoasters.</p> <p>Or a verb can be used to describe an occurrence, that's something happening. For example, the word 'became' in this sentence:</p> <p>The caterpillar <u>became</u> a butterfly.</p> <p>When writing, make sure every sentence includes a verb.</p> <p>Have a go at task 1 and see how you get on – the answers are attached to the end of this plan but remember not to look until you have finished!!</p> <p><a href="https://www.bbc.co.uk/bitesize/topics/zrqqtfr/articles/zpxhdxs">https://www.bbc.co.uk/bitesize/topics/zrqqtfr/articles/zpxhdxs</a></p>	<p>Maths brain warm-up: count forwards and backwards in 2's starting at 22 – how far can you go?</p> <p><b>Task 1</b></p> <p>This session we are going to go back to looking at 2D and 3D shapes. You already know a lot about shapes so lets see what you can recall over the next few sessions. Remember you should be able to identify shapes according to their properties so if I told you that a shape had 3 sides and 3 vertices then you should be able to identify it as a triangle.</p> <p>Task 1 – looking at properties of 2D shapes. You can look at the video on the white Rose maths site to remind you then have a look at the task attached to this plan.</p> <p><a href="https://whiterosemaths.com/homelearning/year-2/">https://whiterosemaths.com/homelearning/year-2/</a></p> <p>there are also some activities on the bbc bitesize website if you want to have a go at these.</p> <p><a href="https://www.bbc.co.uk/bitesize/tags/z7s22sg/year-2-and-p3-lessons">https://www.bbc.co.uk/bitesize/tags/z7s22sg/year-2-and-p3-lessons</a></p>

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2	<p>Continue reading the book you have chosen.</p>	<p><b>Task 2</b> This task is all about adverbs. An <b>adverb</b> is simply a word that describes a verb (an action or a doing word). He ate his breakfast quickly. The word 'quickly' <b>is an adverb</b> as it tells us how he ate.</p> <p>Have a go at task 2 and remember you can check your answers when you have finished.</p>	<p>Maths brain warm up: count in 5's forward and backward starting at 15. How far can you go?</p> <p><b>Task 2</b> For this session we are looking at the properties of 3D shapes. Have a look at the video on the white Rose website to remind you then try doing the task attached to this plan.</p> <p><a href="https://whiterosemaths.com/homelearning/year-2/">https://whiterosemaths.com/homelearning/year-2/</a></p> <p>there are also some activities on the bbc bitesize website if you want to have a go at these.</p> <p><a href="https://www.bbc.co.uk/bitesize/tags/z7s22sg/year-2-and-p3-lessons">https://www.bbc.co.uk/bitesize/tags/z7s22sg/year-2-and-p3-lessons</a></p>
3	<p>Continue reading the book you have chosen. Have a go at explaining to someone in your house what the book is about.</p>	<p><b>Task 3</b> For this task we are looking at using the suffix 'ly' which can be added to the end of an adjective to make it into an adverb</p> <p>Have a go at task 3 and check your answers when you have finished.</p>	<p>Maths brain warm up – this time count in 10's forward and backward starting at 70, how far can you go? What if you start at 24 can you still count in 10's ?</p> <p><b>Task 3</b> This is all about sorting shapes, have a look at the White Rose website and watch the video to remind you of what to do.</p> <p><a href="https://whiterosemaths.com/homelearning/year-2/">https://whiterosemaths.com/homelearning/year-2/</a></p> <p>there are also some activities on the bbc bitesize website if you want to have a go at these.</p> <p><a href="https://www.bbc.co.uk/bitesize/tags/z7s22sg/year-2-and-p3-lessons">https://www.bbc.co.uk/bitesize/tags/z7s22sg/year-2-and-p3-lessons</a></p>
4	<p>Continue reading the book you have chosen.</p>	<p><b>Task 4</b> This one is all about recognising adverbs in sentences. Read the sentence carefully and see if you can pick out the adverb.</p>	<p>Maths brain warm up: mental maths challenge – can you find the answer without writing anything down? <math>68 \div 2 = ?</math></p> <p><b>Task 4</b></p>

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	<p>Have you come across any words that you don't know the meaning of? If you have, write them down and see if you can find out what their meaning is.</p>		<p>We are looking at shape patterns for this task, you can look at the video on White Rose maths to remind you of what to do then have a go at the task attached to this plan. <a href="https://whiterosemaths.com/homelearning/year-2/">https://whiterosemaths.com/homelearning/year-2/</a></p> <p>there are also some activities on the bbc bitesize website if you want to have a go at these.  <a href="https://www.bbc.co.uk/bitesize/tags/z7s22sg/year-2-and-p3-lessons">https://www.bbc.co.uk/bitesize/tags/z7s22sg/year-2-and-p3-lessons</a></p>
5	<p>Continue reading the book you have chosen. When you have finished it you could either write a book review or draw a picture and write an explanation about what happens in the book and email it to me.</p> <p><a href="mailto:blue@beaupre.cambs.sch.uk">blue@beaupre.cambs.sch.uk</a></p>	<p><b>Task 5</b> To finish off this week we are looking at using adverbs in sentences. When you are writing your sentence, make sure you have included all the 'must haves' for a sentence; can you remember what they are?</p>	<p>Maths brain warm up: count in 100's forward and backward. Start at 120 and see how far you can go.</p> <p><b>Task 5</b> We are looking at a maths challenge based on shapes for this session, I have attached the task to this plan. Read the questions carefully and try and solve the puzzle, good luck.</p>

## Writing Task 1

### Different Types of Verbs

1a. Give three different ways you could complete this sentence using different action verbs. Use the word bank to help you.

Katie \_\_\_\_ across the road.

ran	bark	skipped
ate	hurried	cook
walked	chop	went



### Different Types of Verbs

1b. Give three different ways you could complete this sentence using different action verbs. Use the word bank to help you.

They \_\_\_\_ outside in the sunshine.

sat	push	played
chop	lay	boy
sunbathed	blow	slept



2a. Ishmael has started writing a sentence.

Last week, they...

Complete the sentence using the verb 'jumped'.



2b. Yolanda has started writing a sentence.

Then, Yussuf...

Complete the sentence using the verb 'played'.



3a. Hilda has written this sentence.

Later, we danced under the stars.

She thinks that the verb is 'under'. Is she correct? Explain your answer.



3b. Jake has written this sentence.

The beautiful tree swayed in the wind.

He thinks that the verb is 'swayed'. Is he correct? Explain your answer.



### Different Types of Verbs

4a. Give three different ways you could complete this sentence. Say which type of verb you have used.

The sandwich \_\_\_\_ delicious so I took a big bite.



### Different Types of Verbs

4b. Give three different ways you could complete this sentence. Say which type of verb you have used.

Carla and Mel \_\_\_\_ home when it started to rain.



5a. Kyle has started writing a sentence.

She likes ice-cream but...

Complete the sentence using the linking verb 'hates'.



5b. Rachel has started writing a sentence.

Tomorrow is Saturday and we...

Complete the sentence using the linking verb 'feel'.



6a. Michelle has written this sentence.

She went to the shops for some chocolate.

She thinks that she has used two action verbs. Is she correct? Explain your answer.



6b. Phil has written this sentence.

Jack is tall and athletic.

He thinks that he has used two verbs because he has used the conjunction 'and'. Is he correct? Explain your answer.



Different Types of Verbs

Different Types of Verbs

7a. Give three different ways you could complete this sentence. Say which type of verb you have used.

What did the girl \_\_\_\_\_ like?



A

7b. Give three different ways you could complete this sentence. Say which type of verb you have used.

What a lovely day it \_\_\_\_\_ !



A

8a. George has started writing a sentence.

Pauline went to the park when...

Complete the sentence using a linking verb.



A

8b. Meredith has started writing a sentence.

Last week, it rained and I...

Complete the sentence using a linking verb.



A

9a. Lara has written this exclamation sentence.

How fortunate we are at Christmas time when we open our presents!

She thinks that she has used a linking verb. Is she correct? Explain your answer.



E

9b. Frank has written this question.



Whose is this bag and why is it here?



He thinks that he has used two of the same verb type. Is he correct? Explain your answer.



E

## Writing Task 2

What are Adverbs?	What are Adverbs?
<p>1a. Adil is thinking of adverbs to describe the verb 'talk'. He says,</p> <div>  <p>I can use 'loudly' and 'quietly' because they describe how people can talk.</p> <p>Adil</p> </div> <p>Is he correct? Explain your answer.</p> <p>☆</p>	<p>1b. Mariam is thinking of adverbs to describe the verb 'sit'. She says,</p> <div>  <p>I can use 'quickly' and 'slowly' because they describe how someone can sit.</p> <p>Mariam</p> </div> <p>Is she correct? Explain your answer.</p> <p>☆</p>
<p>2a. Ben wants to use the adverb below in his sentence about a cat sleeping.</p> <div> <p><b>calmly</b></p> </div> <p>Explain how it will improve his sentence.</p> <p>☆</p>	<p>2b. Ruby wants to use the adverb below in her sentence about completing her homework.</p> <div> <p><b>quickly</b></p> </div> <p>Explain how it will improve her sentence.</p> <p>☆</p>
<p>3a. Write an adverb to match the verb below.</p> <div> <p><b>swim</b></p> </div> <p>☆</p>	<p>3b. Write an adverb to match the verb below.</p> <div> <p><b>drives</b></p> </div> <p>☆</p>

What are Adverbs?	What are Adverbs?
<p>4a. Cora is thinking of adverbs to describe the verb 'walk'. She says,</p> <div>  <p>I can use 'quickly', 'slowly' and 'fast' because they all describe how people can walk.</p> <p>Cora</p> </div> <p>Is she correct? Explain your answer.</p> <p>☆</p>	<p>4b. Stefan is thinking of adverbs to describe the verb 'grow'. He says,</p> <div>  <p>I can use 'quickly', 'straight' and 'politely' because they all describe how something can grow.</p> <p>Stefan</p> </div> <p>Is he correct? Explain your answer.</p> <p>☆</p>
<p>5a. Louis wants to use the adverb below in his sentence about singing a solo.</p> <div> <p><b>bravely</b></p> </div> <p>Explain how it will improve his sentence.</p> <p>☆</p>	<p>5b. Lily wants to use the adverb below in his sentence about arriving at school.</p> <div> <p><b>late</b></p> </div> <p>Explain how it will improve her sentence.</p> <p>☆</p>
<p>6a. Write a verb to match the adverb below.</p> <div> <p><b>rudely</b></p> </div> <p>☆</p>	<p>6b. Write a verb to match the adverb below.</p> <div> <p><b>curiously</b></p> </div> <p>☆</p>



### What are Adverbs?

7a. Dennis is thinking of adverbs to describe the verb 'wait'. He says,



Dennis

I can use 'patiently', 'calmly' and 'sensibly' because they all describe how you can wait.

Is he correct? Explain your answer.



### What are Adverbs?

7b. Lucy is thinking of adverbs to describe the verb 'broke'. She says,



Lucy

I can use 'accidentally', 'naughtily' and 'clumsily' because they all describe how something can be broken.

Is she correct? Explain your answer.



8a. Zain wants to use the adverb below in his sentence about reading his book.

**happily**

Explain how it will improve his sentence.



8b. Sophie wants to use the adverb below in her sentence about working.

**busily**

Explain how it will improve her sentence.



9a. Write a verb to match the adverb below.

**lazily**





9b. Write a verb to match the adverb below.



**angrily**





### Writing Task 3

Adding -ly (To words)	Adding -ly (To words)
<p>1a. Circle the odd one out.</p> <p>badly                      sadly</p> <p>   strongly</p> <p>bookly                      quietly</p> <p>safely                      loudly</p> <p>Explain your reasoning.</p> <p>☆</p>	<p>1b. Circle the odd one out.</p> <p>neatly                      penly</p> <p>   brightly</p> <p>safely                      loudly</p> <p>Explain your reasoning.</p> <p>☆</p>
<p>2a. Sam says,</p> <div>  <div>Run is an adjective so <u>runly</u> is an adverb.</div> </div> <p>Is he correct?</p> <p>Explain how you know.</p> <p>☆</p>	<p>2b. Kim says,</p> <div>  <div>Swim is an adjective so <u>swimly</u> is an adverb.</div> </div> <p>Is she correct?</p> <p>Explain how you know.</p> <p>☆</p>
<p>3a. Choose an adjective that you can turn into an adverb. Write the adverb.</p> <p>blue      quick      big</p> <p>_____</p> <p>☆</p>	<p>3b. Choose an adjective that you can turn into an adverb. Write the adverb.</p> <p>slow      long      green</p> <p>_____</p> <p>☆</p>

Adding -ly (To words)	Adding -ly (To words)
<p>4a. Circle the odd one out.</p> <p>quick                      quiet</p> <p>   bad</p> <p>fair                      good</p> <p>Explain your reasoning.</p> <p>☆</p>	<p>4b. Circle the odd one out.</p> <p>glad                      well</p> <p>   light</p> <p>curious                      great</p> <p>Explain your reasoning.</p> <p>☆</p>
<p>5a. Jack says,</p> <div>  <div>Straight is an adjective so <u>straightly</u> is an adverb.</div> </div> <p>Is he correct?</p> <p>Explain how you know.</p> <p>☆</p>	<p>5b. Sarah says,</p> <div>  <div>Big is an adjective so <u>bigly</u> is an adverb.</div> </div> <p>Is she correct?</p> <p>Explain how you know.</p> <p>☆</p>
<p>6a. Choose an adjective and turn it into an adverb to describe the verb <u>shout</u>.</p> <p>hard      quick      little</p> <p>kind      fast      loud</p> <p>☆</p>	<p>6b. Choose an adjective and turn it into an adverb to describe the verb <u>sit</u>.</p> <p>neat      long      silent</p> <p>sweet      straight      good</p> <p>☆</p>

Adding -ly (To words)

Adding -ly (To words)

7a. Circle the odd one out.

messy                      heavy  
  
                                 shy  
  
sneaky                      angry

Explain your reasoning.



7b. Circle the odd one out.

tidy                              easy  
  
                                 greedy  
  
noisy                              friendly

Explain your reasoning.



8a. Josh says,



Happy is the adjective so  
happily is the adverb.

Is he correct?

Explain how you know.



8b. Megan says,



Shy is the adjective so  
shily is the adverb.

Is she correct?

Explain how you know.



9a. Choose an adjective and turn it into an adverb to describe the verb march.

easy      hungry      far  
  
noisy      confident      lonely











9b. Choose an adjective and turn it into an adverb to describe the verb crawl.

polite      sneaky      merry  
  
angry      rainy      sleepy



## Writing Task 4

Recognising Adverbs in Sentences	Recognising Adverbs in Sentences	Recognising Adverbs in Sentences	Recognising Adverbs in Sentences										
<p>1a. Ben and Fatima are reading this sentence.</p> <p>I bravely tackled the striker.</p> <div>  <p>The adverb is tackled.</p> </div> <div>  <p>The adverb is bravely.</p> </div> <p>Who is correct? Explain your answer.</p> <p>☆</p>	<p>1b. Gabriela and Jan are reading this sentence.</p> <p>My cat cried loudly to be fed.</p> <div>  <p>The adverb is loudly.</p> </div> <div>  <p>The adverb is cried.</p> </div> <p>Who is correct? Explain your answer.</p> <p>☆</p>	<p>4a. Zain and Lucy are reading this sentence.</p> <p>The boy worked hard on his model.</p> <div>  <p>The adverb is worked.</p> </div> <div>  <p>The adverb is hard.</p> </div> <p>Who is correct? Explain your answer.</p> <p>☆</p>	<p>4b. Noah and Sofia are reading this sentence.</p> <p>The blackbird is singing tunefully.</p> <div>  <p>The adverb is tunefully.</p> </div> <div>  <p>The adverb is singing.</p> </div> <p>Who is correct? Explain your answer.</p> <p>☆</p>										
<p>2a. Is the adverb used correctly in this sentence?</p> <p>My mum jokingly told me off because my bedroom was a mess.</p> <p>Explain your answer.</p> <p>☆</p>	<p>2b. Is the adverb used correctly in this sentence?</p> <p>We shouted quietly when our team scored a goal.</p> <p>Explain your answer.</p> <p>☆</p>	<p>5a. Is the adverb used correctly in this sentence?</p> <p>The class cheered miserably when they won the school competition.</p> <p>Explain your answer.</p> <p>☆</p>	<p>5b. Is the adverb used correctly in this sentence?</p> <p>Our dogs bark silently when the postal worker delivers our letters.</p> <p>Explain your answer.</p> <p>☆</p>										
<p>3a. Choose an adverb from the word bank to complete these sentences.</p> <table border="1"> <tr> <td>wildly</td> <td>joyfully</td> </tr> </table> <p>We all sang _____ at the choir concert.</p> <p>The children cheered _____ at the pop band.</p> <p>☆</p>	wildly	joyfully	<p>3b. Choose an adverb from the word bank to complete these sentences.</p> <table border="1"> <tr> <td>madly</td> <td>kindly</td> </tr> </table> <p>Suzie _____ shared her sweets with the other children.</p> <p>The crowd shouted _____ at the referee.</p> <p>☆</p>	madly	kindly	<p>6a. Choose an adverb from the word bank to complete these sentences.</p> <table border="1"> <tr> <td>safely</td> <td>fast</td> <td>rudely</td> </tr> </table> <p>The crowd laughed _____ at the dancers.</p> <p>The children _____ crossed the road to go to the park.</p> <p>During the race, the team swam _____.</p> <p>☆</p>	safely	fast	rudely	<p>6b. Choose an adverb from the word bank to complete these sentences.</p> <table border="1"> <tr> <td>politely</td> <td>nervously</td> <td>well</td> </tr> </table> <p>During the test he learner drove _____.</p> <p>After the interview the lady smiled _____.</p> <p>The girl shook _____ on the rollercoaster.</p> <p>☆</p>	politely	nervously	well
wildly	joyfully												
madly	kindly												
safely	fast	rudely											
politely	nervously	well											

Recognising Adverbs in Sentences

7a. Oliver and Ruby are reading this sentence.

We skipped in the garden happily.



Oliver

The adverb is skipped.



Ruby

The adverb is happily.

Who is correct? Explain your answer.



Recognising Adverbs in Sentences

7b. Jojo and Emily are reading this sentence.

I am shouting at the TV angrily.



Emily

The adverb is shouting.



Jojo

The adverb is angrily.

Who is correct? Explain your answer.



8a. Is the adverb used correctly in this sentence?

My friend feels like he is going to cry, so I am trying hard to get him to join our game.

Explain your answer.



8b. Is the adverb used correctly in this sentence?

This morning the farmer is funnily feeding his cows as they wait in the old barn.

Explain your answer.



9a. Choose an adverb from the word bank to complete these sentences.

crazily	early	cheekily
---------	-------	----------

The monkey \_\_\_\_\_ stole my sandwiches when I wasn't looking.

"You are going to bed \_\_\_\_\_ tonight," shouted Mum.

The racing driver drove \_\_\_\_\_ around the race track.



9b. Choose an adverb from the word bank to complete these sentences.

lazily	late	seriously
--------	------	-----------

Due to the bad traffic, we arrived \_\_\_\_\_ to the show and missed the beginning.

The boy strolled \_\_\_\_\_ across the playground even though he was late.

The judge thought \_\_\_\_\_ about the crime the man had committed.



## Writing Task 5

### Using Adverbs in Sentences

1a. Change the adverb in the sentence below to alter how the verb is done.

The plant in the garden grew slowly.



### Using Adverbs in Sentences

1b. Change the adverb in the sentence below to alter how the verb is done.

The wind blew strongly.



2a. Create your own sentence using the adverb below.

quietly



2b. Create your own sentence using the adverb below.

loudly



3a. Is the adverb in the correct place in the sentence below?

The nicely postman smiled in the morning.

Explain your answer.



3b. Is the adverb in the correct place in the sentence below?

The teachers at my school are all nearly men.

Explain your answer.



### Using Adverbs in Sentences

4a. Change the adverb in the sentence below to alter how the verb is done.

The mouse crept silently to the cupboard because it wanted to find some cheese to eat.



### Using Adverbs in Sentences

4b. Change the adverb in the sentence below to alter how the verb is done.

The girl spoke cheerfully about her trip to the park when she went to see her grandma.



5a. Create your own multi-clause sentence using the words below.

boldly

but



5b. Create your own multi-clause sentence using the words below.

early

when



6a. Is the adverb in the correct place in the sentence below?

Mandy was excited for the big race because she had well trained.

Explain your answer.



6b. Is the adverb in the correct place in the sentence below?

The excitedly family laughed because they were going on holiday.

Explain your answer.





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### Using Adverbs in Sentences

7a. Change the adverb in the sentence below to alter how the verb is done.

The young girl lost her balance and fell heavily to the floor.



### Using Adverbs in Sentences

7b. Change the adverb in the sentence below to alter how the verb is done.

The dog lay cosily in the new basket that his owners had bought him.



8a. Create your own multi-clause sentence using the words below.

sleepily

but



8b. Create your own multi-clause sentence using the words below.

recklessly

or



9a. Is the adverb in the correct place in the sentence below?

They didn't have to long wait for the sun to rise and for a new day to begin.

Explain your answer.



9b. Is the adverb in the correct place in the sentence below?

The child crept sneakily into the kitchen and took the last piece of cake from the fridge.


Explain your answer.





# Maths task 1


### Count Vertices on 2D Shapes


1a. Joshua and Isaac each have some shapes.


  
Isaac


  
triangle


  
square

  
circle

  
Joshua

  
pentagon


  
triangle


  
rectangle


How many vertices do they each have?  
Who has the most number of vertices?


2a. Complete the table with the shapes below.


fewer than 5 vertices	5 or more vertices

  
A


  
B

  
C



  
D

  
E

3a. Courtney wants to collect a total of 9 vertices. She says,




I need a triangle and a hexagon.






Is she correct? Explain how you know.


### Count Vertices on 2D Shapes


1b. Lucy and Isabel each have some shapes.


  
Lucy


  
rectangle


  
square

  
octagon

  
Isabel

  
pentagon


  
pentagon


  
triangle


How many vertices do they each have?  
Who has the fewest number of vertices?


2b. Complete the table with the shapes below.


fewer than 6 vertices	6 or more vertices

  
A


  
B

  
C



  
D

  
E

3b. Jamie wants to collect a total of 12 vertices. He says,




I need a rectangle and a pentagon.






Is he correct? Explain how you know.


### Count Vertices on 2D Shapes


4a. Gabriel and Sean each have some shapes.


  
Gabriel









  
Sean










How many vertices do they each have?  
Who has the most number of vertices?


5a. Complete the table with the shapes below.


fewer than 5 vertices	5 or more vertices

  
A


  
B

  
C



  
D

  
E

6a. Cian wants to collect a total of 9 vertices. He says,




I need 2 triangles and a pentagon.






Is he correct? Explain how you know.


### Count Vertices on 2D Shapes


4b. Lily and Karen each have some shapes.


  
Lily









  
Karen










How many vertices do they each have?  
Who has the fewest number of vertices?


5b. Complete the table with the shapes below.


fewer than 5 vertices	6 or more vertices

  
A


  
B

  
C



  
D

  
E

6b. Jal wants to collect a total of 11 vertices. He says,



I need 2 rectangles and a triangle.

Is he correct? Explain how you know.



Count Vertices on 2D Shapes

Count Vertices on 2D Shapes

7a. Jon and Alice each have some shapes.



I have a pentagon, 3 triangles and an oval.



I have a square, an octagon and a hexagon.

How many vertices do they each have?  
Who has the most number of vertices?



7b. Sameema and Polly each have some shapes.



I have 2 rectangles, an octagon and a pentagon.



I have 3 squares and 2 hexagons.

How many vertices do they each have?  
Who has the fewest number of vertices?



8a. Complete the table. Which shape cannot be sorted into the table?

fewer than 5 vertices	4 or more vertices

pentagon triangle square  
octagon hexagon



8b. Write 2 suitable headings for the table based on the number of vertices each shape has. One shape cannot be sorted.

pentagon hexagon	triangle square

octagon



9a. Courtney wants to collect a total of 15 vertices. She says,



I need a 3 triangles and an octagon.

Is she correct? Explain how you know.



9b. Jamie wants to collect a total of 14 vertices. He says,



I need 2 rectangles and 2 pentagons.

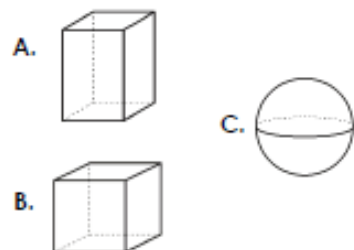
Is he correct? Explain how you know.



## Maths task 2

### Count Faces on 3D Shapes

1a. Look at the faces. Which shape is the odd one out?



Explain your answer.



2a. Complete the table below.



Name	Number of flat faces	2D shape of faces
cone		
		square
		triangle



3a. Which group of shapes has the greatest number of flat faces?

3 cylinders

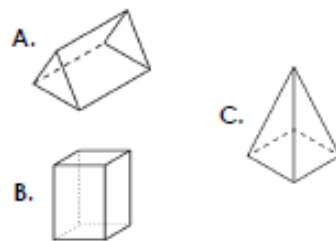


2 cuboids



### Count Faces on 3D Shapes

1b. Count the faces. Which shape is the odd one out?



Explain your answer.



2b. Complete the table below.



Name	Number of flat faces	2D shape of faces
		square
		circle
cylinder		



3b. Which group of shapes has the greatest number of flat faces?

2 square-based pyramids

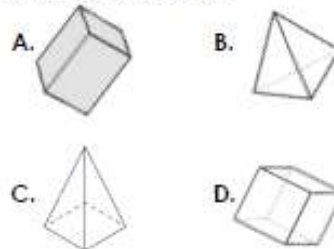


2 triangular-based pyramids



### Count Faces on 3D Shapes

4a. Look at the shape of the faces. Which shape is the odd one out?



Explain your answer.



5a. Complete the table below.

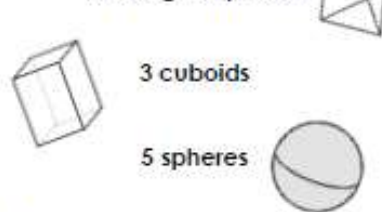


Name	Number of flat faces	2D shape of faces
		rectangle triangle
cone		



6a. Which group of shapes has the greatest number of flat faces?

3 triangular prisms



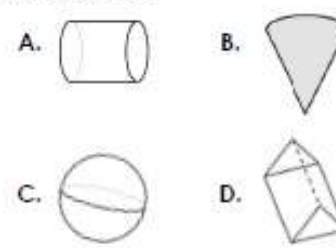
3 cuboids

5 spheres



### Count Faces on 3D Shapes

4b. Look at the surfaces. Which shape is the odd one out?



Explain your answer.



5b. Complete the table below.



Name	Number of flat faces	2D shape of faces
		square
cuboid		
		triangle

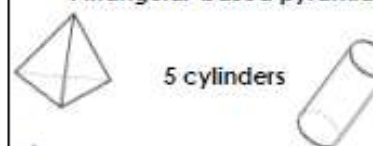


6b. Which group of shapes has the greatest number of flat faces?

2 cubes



4 triangular-based pyramids

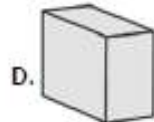
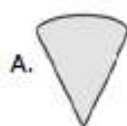


5 cylinders



Count Faces on 3D Shapes

7a. Look at the surfaces. Which shape is the odd one out?



Explain your answer.



Count Faces on 3D Shapes

7b. Count the faces and look at the numbers. Which shape is the odd one out?



Explain your answer.



8a. Complete the table below using different shapes.

Name	Number of flat faces	2D shape of faces
triangular-based pyramid		
		triangle
		square



8b. Complete the table below using different shapes.

Name	Number of flat faces	2D shape of faces
		square
		circle
cylinder		



9a. Which group of shapes has the greatest number of flat faces?

three triangular-based pyramids

four triangular prisms

three square-based pyramids

two cuboids



9b. Which group of shapes has the greatest number of flat faces?

three cubes

eight cylinders

three triangular-based pyramids

two triangular prisms

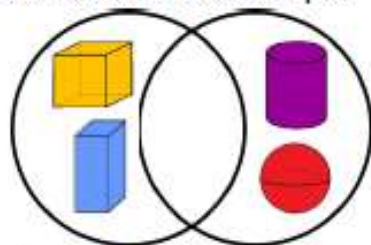




# Maths task 3

## Sort 3D Shapes

1a. Ben has sorted these 3D shapes.



Flat faces

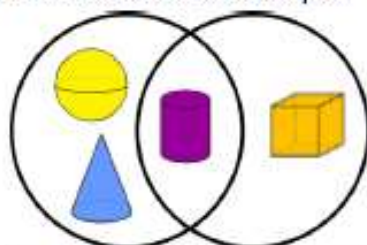
Curved surface

Is he correct? Explain why.



## Sort 3D Shapes

1b. Isha has sorted these 3D shapes.



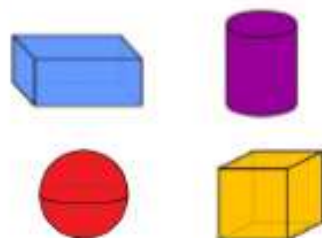
Will roll

Will slide

Is she correct? Explain why.



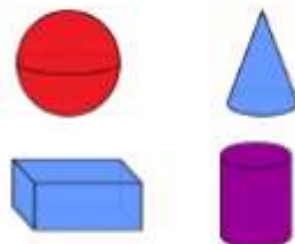
2a. How could you sort these 3D shapes into 2 groups?



How would you label your groups?



2b. How could you sort these 3D shapes into 2 groups according to their faces?



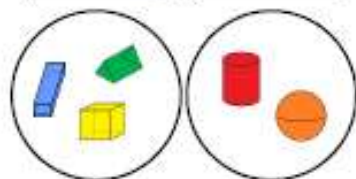
How would you label your groups?



3a. Charlie is sorting some 3D shapes.

Even number of vertices

?



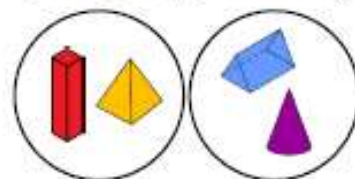
What is Charlie's missing label?



3b. Erik is sorting some 3D shapes.

Even number of edges

?

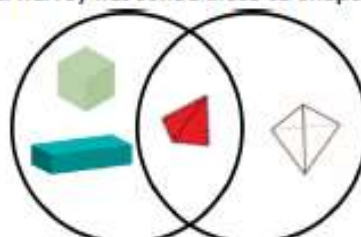


What is Erik's missing label?



## Sort 3D Shapes

4a. Harvey has sorted these 3D shapes.



Rectangular face

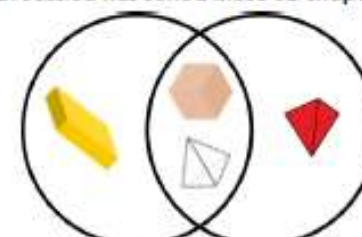
Triangular face

Is he correct? Explain why.



## Sort 3D Shapes

4b. Jessica has sorted these 3D shapes.



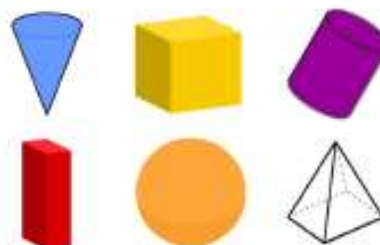
Even number of faces

Even number of vertices

Is she correct? Explain why.



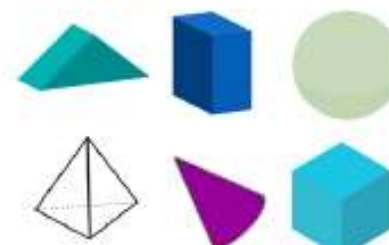
5a. How could you sort these 3D shapes into 2 groups?



How would you label your groups?



5b. How could you sort these 3D shapes into 2 groups?



How would you label your groups?



6a. Anya is sorting some 3D shapes.

Even number of vertices

?



What is Anya's missing label?



6b. Adam is sorting some 3D shapes.

Even number of faces

?

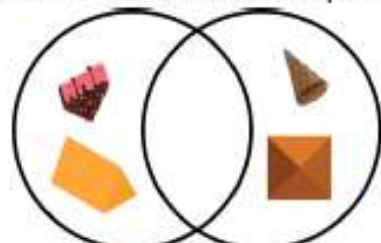


What is Adam's missing label?



Sort 3D Shapes

7a. Alina has sorted these 3D shapes.



Odd number  
of faces

Odd number  
of vertices

Is she correct? Explain why.



Sort 3D Shapes

7b. Kai has sorted these 3D shapes.



Even number  
of edges

Odd number  
of vertices

Is he correct? Explain why.



8a. How could you sort these 3D shapes into 2 groups according to their faces?



How would you label your groups?



8b. How could you sort these 3D shapes into 2 groups according to their edges?



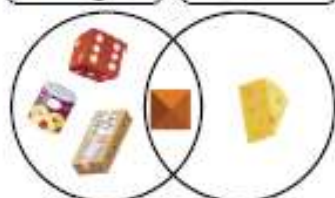
How would you label your groups?



9a. Jasper is sorting some 3D shapes.

Even number  
of edges

?



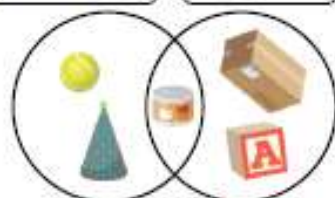
What is Jasper's missing label?  
Give two possibilities.



9b. Kamran is sorting some 3D shapes.

Circular faces/  
curved surface

?



What is Kamran's missing label?  
Give two possibilities.





# Maths task 4

## Make Patterns with 3D Shapes

1a. Tom has made a pattern using these 3D shapes.



The 4<sup>th</sup> shape is a cuboid.  
The 1<sup>st</sup> shape is a cylinder.

Create the pattern using the names of the shapes.



## Make Patterns with 3D Shapes

1b. Kim has made a pattern using these 3D shapes.

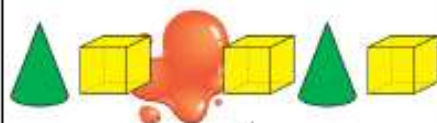


The 4<sup>th</sup> shape is a pyramid.  
The 1<sup>st</sup> shape is a sphere.

Create the pattern using the names of the shapes.



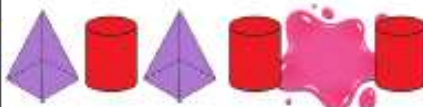
2a. Name the shape hidden under the splat.



Explain how you know.



2b. Name the shape hidden under the splat.



Explain how you know.



3a. The children are talking about the pattern.



The 3<sup>rd</sup> shape will be a sphere.

The 3<sup>rd</sup> shape will be a pyramid.



Who is correct? Explain why.



3b. The children are talking about the pattern.



The 5<sup>th</sup> shape will be a cube.

The 5<sup>th</sup> shape will be a cuboid.



Who is correct? Explain why.



## Make Patterns with 3D Shapes

4a. Stan has made a pattern using these 3D shapes.



The sixth shape is a large cone.  
The first shape is a sphere.  
The small cone comes before the large cone.

Create the pattern using the names of the shapes.



## Make Patterns with 3D Shapes

4b. Anna has made a pattern using these 3D shapes.



The eighth shape is a pyramid.  
The first shape is a cuboid.  
The pyramid comes before the cylinder.

Create the pattern using the names of the shapes.



5a. Name the shapes hidden under the splat.



Explain how you know.



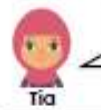
5b. Name the shapes hidden under the splat.



Explain how you know.



6a. The children are talking about the pattern.



The 9<sup>th</sup> shape will be a small cylinder.

The 9<sup>th</sup> shape will be a large cylinder.



Who is correct? Explain why.



6b. The children are talking about the pattern.



The 10<sup>th</sup> shape will be a large cuboid.

The 10<sup>th</sup> shape will be a pyramid.



Who is correct? Explain why.



### Make Patterns with 3D Shapes

7a. Ernie has made a pattern using these 3D shapes.



The ninth shape is a cylinder.  
The first shape is a cone.  
The cube comes before the cylinder.

Create the pattern using the names of the shapes.



### Make Patterns with 3D Shapes

7b. Malia has made a pattern using these 3D shapes.



The tenth shape is a small pyramid.  
The first shape is a small pyramid.

Create the pattern using the names of the shapes.



8a. Name the shapes hidden under the splat.



Explain how you know.



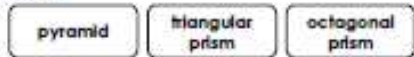
8b. Name the shapes hidden under the splat.



Explain how you know.



9a. The children are talking about the pattern.



The eleventh shape will be a octagonal prism.

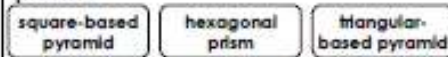
The eleventh shape will be a triangular prism.



Who is correct? Explain why.



9b. The children are talking about the pattern.



The twelfth shape will be a triangular-based pyramid.

The twelfth shape will be a square-based pyramid.



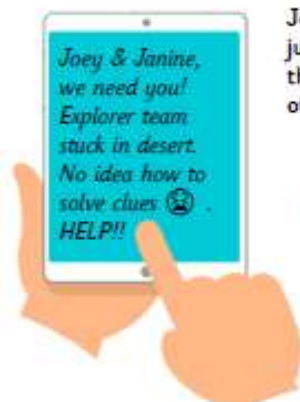
Who is correct? Explain why.





# Maths task 5

## Reasoning and Problem Solving – Properties of Shape – Year 2



Joey and Janine are on an explorers' holiday. They have just received an urgent message from their team who are in the middle of the deserted caves of Abubayabu, in search of the hidden tomb of a great and magical king.



Looks like our holiday will have to wait!

Please help us! The quicker we finish the quicker we get back on holiday!



1. The team have made their way into the caves and are at the beginning of the journey down into the tomb.

The map has a puzzle to protect its hiding place.

These shapes have been carved into the cave wall.

Help solve the puzzle to access the map.

Write the names of the shapes in the order you would press them.

1<sup>st</sup> Shape: The first is smooth with only one side.

2<sup>nd</sup> Shape: The next has four of each.

3<sup>rd</sup> Shape: The third has an even number of sides, more than all the others.

4<sup>th</sup> Shape: The fourth is the least of the corners here.

5<sup>th</sup> Shape: The next has the same sides as its number in order.

6<sup>th</sup> Shape: The final shape needs a bond of four to make its sides equal ten.

Press the shapes in order to find the map in the den.



Name of Shape 1	Name of Shape 2	Name of Shape 3	Name of Shape 4	Name of Shape 5	Name of Shape 6

## Reasoning and Problem Solving – Properties of Shape – Year 2

The map is freed. It shows a complex route of caverns, dangerous ravines to cross and a few more tricks and puzzles protecting the King's tomb. Keep going... IF YOU DARE!

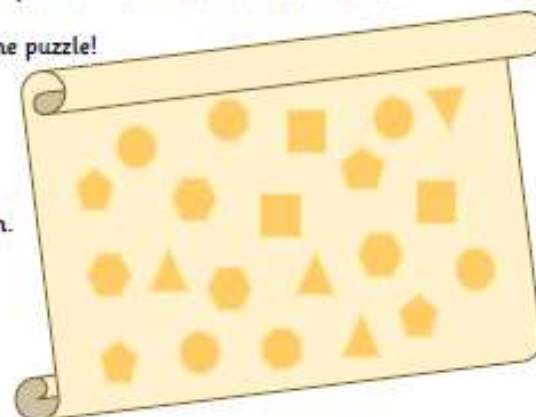
2. In the first cavern you approach, there are ropes and pulleys holding poisonous arrows and enormous rocks high in the air, ready to drop if you trip the system.

To pass safely, you must complete the puzzle by drawing a line from the bottom of the page to the top, passing through shapes in order of their number of sides.

Hang on... there's an extra part of the puzzle!

Draw the line only through the shapes at their line of symmetry. You can only cross a shape once.

Find and draw a safe route on the map to take you through the cavern.



You've made it! Joey thinks he knows where to go next, but it doesn't look safe! A rickety rope bridge is stretched across a deep dark ravine, one wrong move and it will snap. Joey rushes ahead full of excitement.



CRACK!!!



LOOK OUT!!!

3. The rope on the bridge snaps! Which tool will fit the shape of the holes in the post below to reattach the rope and save Joey? Draw a line from the tool to the matching hole.



## Blue Class – Home Learning – w.b. 15<sup>th</sup> June 2020

### Reasoning and Problem Solving – Properties of Shape – Year 2

Phew! You made it, everyone is safely across the bridge.

The next cavern is blocked with a huge cylindrical rock. No matter who pushes or pulls, it just won't move.

Janine spots a puzzle on the wall and a pile of carved rocks, she can't work out how it all fits together. They need your help. Which rock goes into which hole?

4. Use the shape names to give Joanne instructions.



5. The stone has rolled aside to reveal a deep dark cavern. Walking into the darkness, the team come to a dark wall with pictures drawn upon the surface.

They are pictures drawn using 2D shapes of animals.

You need to draw another picture of an animal, made from only 2D shapes, to appease the animal Gods in the caverns below and protect the team.



### Reasoning and Problem Solving – Properties of Shape – Year 2

You have travelled safely through the darkest caverns and arrived at the animal temple. Your drawing has shown them you are respectful.



6. For the next puzzle you must name a 2D or 3D shape where the number of vertices matches the number of letter in the animals named:

Cat	
Mouse	
Monkey	
Lion	
Leopard	

In the final tunnel there is a balance which must be flat for the team to pass into the tombs beyond.

7. Using the list of 3D shapes, balance the scale so it would have the same number of faces on each end.





## Blue Class – Home Learning – w.b. 15<sup>th</sup> June 2020

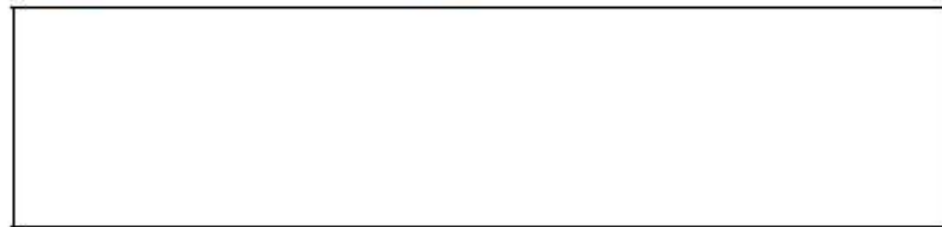
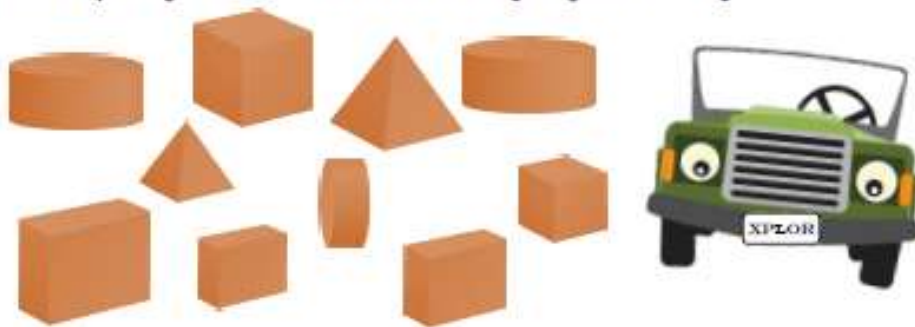
### Reasoning and Problem Solving – Properties of Shape – Year 2



**You did it!** The team enter the tomb and respectfully begin to pack up and dust off the artefacts for labelling, collection and transportation back to the museum.

Heading back out to the open desert, you have piles of packages to fit into your jeep.

8. You need to decide how to pack the jeep. Tell your team which order they should place the packages into the boot to ensure everything stacks neatly.



So, it's back to their holiday for Jo and Janine. Thanks for all your help!

Hang on where are they running off to?



Oh no!

They've left their passports in the tomb, and have to go through all those puzzles again.

## Writing Skills answers

### Task 1

#### Application and Reasoning Different Types of Verbs

##### Developing

1a. Various possible answers, for example: ran, hurried, went

2a. Various possible answers, for example: Last week, they jumped on the trampoline.

3a. No because the verb is 'danced'. 'Under' tells you where something happened.

##### Expected

4a. Various possible answers, for example: To be verb: was; Linking verbs: tasted, looked, felt.

5a. Various possible answers, for example: She likes ice-cream but hates sprinkles on top.

6a. No because the sentence only has one verb: 'went'.

##### Greater Depth

7a. Various possible answers, for example: Linking verbs: look, smell, sound; Action verbs: sing, run, skip

8a. Various possible answers, for example: Pauline went to the park when she felt better.

9a. No because she has used the verb 'are' which is a 'to be' verb and 'open' which is an action verb.

#### Application and Reasoning Different Types of Verbs

##### Developing

1b. Various possible answers, for example: sat, sunbathed, played

2b. Various possible answers, for example: Then, Yussuf played a trick on his brother.

3b. Yes because that is what the tree was doing.

##### Expected

4b. Various possible answers, for example: To be: were, Action verbs: ran, skipped, hurried

5b. Various possible answers, for example: Tomorrow is Saturday and we feel excited.

6b. No because he has only used the verb 'is'. The conjunction has been used to link two adjectives.

##### Greater Depth

7b. Various possible answers, for example: To be verb: was, is; Linking verbs: seems, felt

8b. Various possible answers, for example: Last week, it rained and I got wet.

9b. Yes because he has used two 'to be' verbs.

### Task 2

#### Application and Reasoning What are Adverbs?

##### Developing

1a. Adil is correct. 'Loudly' and 'quietly' both describe how someone can talk.

2a. Adding 'calmly' improves the sentence because it tells us how the cat was sleeping. Without the extra information, we wouldn't know if the cat was sleeping calmly or fitfully, for example.

3a. Various answers, for example: quickly

##### Expected

4a. Cora is correct. 'Quickly', 'slowly' and 'fast' all describe how someone can walk.

5a. Adding 'bravely' improves the sentence because it tells us how the solo was sung. Without the extra information, we wouldn't know if the singer sang the solo bravely or timidly, for example.

6a. Various answers, for example: chatted

##### Greater Depth

7a. Dennis is correct. 'Patiently', 'calmly' and 'sensibly' all describe how you can wait for something.

8a. Adding 'happily' improves the sentence because it tells us how Zain reads his books. Without the extra information, we wouldn't know if Zain reads happily or reluctantly, for example.

9a. Various answers, for example: strolled

#### Application and Reasoning What are Adverbs?

##### Developing

1b. Mariam is incorrect. 'Quickly' and 'slowly' do not describe how someone can sit as they are not moving.

2b. Adding 'quickly' improves the sentence because it tells us how the homework was completed. Without the extra information, we wouldn't know if the homework was completed quickly or slowly, for example.

3b. Various answers, for example: slowly

##### Expected

4b. Stefan is incorrect. 'Politely' does not describe how something can grow.

5b. Adding 'late' improves the sentence because it tells us how Lily arrived at school. Without the extra information, we wouldn't know if Lily arrived late or early, for example.

6b. Various answers for example: asked

##### Greater Depth

7b. Lucy is correct. 'Accidentally', 'naughtily' and 'clumsily' all describe how something can be broken.

8b. Adding 'busily' improves the sentence because it tells us how Sophie is working. Without the extra information, we wouldn't know if she was busily working or slowly working, for example.

9b. Various answers, for example: stomped

## Writing Task 3

### Application and Reasoning Adding -ly (To words)

#### Developing

1a. Bookly is the odd one out because the word book is a noun so it cannot be made into an adverb by adding -ly.

2a. No; run is a verb so it cannot be made into an adverb by adding -ly.

3a. quickly

#### Expected

4a. Good is the odd one out because the other adjectives can become adverbs by adding -ly.

5a. No; straight does not become an adverb when -ly is added.

6a. Various answers, for example: shout loudly.

#### Greater Depth

7a. Shy is the odd one out because the other adjectives can become adverbs by adding -ily.

8a. No; happy ends in y so you need to remove this and add -ily.

9a. Various answers, for example: march confidently.

### Application and Reasoning Adding -ly (To words)

#### Developing

1b. Penly is the odd one out because the word pen is a noun so it cannot be made into an adverb by adding -ly.

2b. No; swim is a verb so it cannot be made into an adverb by adding -ly.

3b. slowly

#### Expected

4b. Well is the odd one out because the other words are adjectives which can become adverbs by adding -ly.

5b. No; big does not become an adverb when -ly is added.

6b. Various answers, for example: sit silently.

#### Greater Depth

7b. Friendly is the odd one out because the other adjectives can become adverbs by adding -ily.

8b. No; 'shy' is an exception because y does not need to be removed (shyly).

9b. Various answers, for example: crawl sneakily.

## Writing Task 4

### Application and Reasoning Recognising Adverbs in Sentences

#### Developing

1a. Fatima is correct. Bravely is the adverb telling us more about the verb tackled.

2a. No, jokingly doesn't make sense in the sentence. Seriously or sternly would be more suitable.

3a. We all sang joyfully at the choir concert.  
The children cheered wildly at the pop band.

#### Expected

4a. Zain is correct. Hard is the adverb telling us more about the verb worked.

5a. No, miserably doesn't make sense in the sentence. Joyfully or happily would be more suitable.

6a. The crowd laughed rudely at the dancers.  
The children safely crossed the road to go to the park.  
During the race, the team swam fast.

#### Greater Depth

7a. Ruby is correct. Happily is the adverb telling us more about the verb skipped.

8a. Yes, hard makes sense in this sentence. The person was trying hard to get the friend to play.

9a. The monkey cheekily stole my sandwiches when I wasn't looking.  
"You are going to bed early tonight," shouted Mum.  
The racing driver drove crazily around the race track.

### Application and Reasoning Recognising Adverbs in Sentences

#### Developing

1b. Gabriela is correct. Loudly is the adverb telling us more about the verb cried.

2b. No, quietly doesn't make sense in the sentence. Loudly or wildly would be more suitable.

3b. Suzie kindly shared her sweets with the other children.  
The crowd shouted madly at the referee.

#### Expected

4b. Noah is correct. Tunelessly is the adverb telling us more about the verb singing.

5b. No, silently doesn't make sense in the sentence. Ferociously or fiercely would be more suitable.

6b. During the test the learner drove well.  
After the interview the lady smiled politely.  
The girl shook nervously on the rollercoaster.

#### Greater Depth

7b. Jojo is correct. Angrily is the adverb telling us more about the verb shouting.

8b. No, funnily doesn't make sense in the sentence. Busily or happily would be more suitable.

9b. Due to the bad traffic, we arrived late to the show and missed the beginning.  
The boy strolled lazily across the playground even though he was late.  
The judge thought seriously about the crime the man had committed.

## Writing Task 5

### Application and Reasoning Using Adverbs in Sentences

#### Developing

- 1a. Various answers, for example: The plant in the garden grew quickly.  
2a. Various answers, for example: The spy whispered quietly.  
3a. No. The adverb 'nicely' needs to come before or after the verb 'smiled' e.g. The postman smiled nicely in the morning.

#### Expected

- 4a. Various answers, for example: The mouse crept nervously to the cupboard because it wanted to find some cheese to eat.  
5a. Various answers, for example: The girl ran boldly after the thief but she couldn't keep up.  
6a. No. The adverb 'well' needs to come after the verb 'trained' e.g. Mandy was excited for the big race because she had trained well.

#### Greater Depth

- 7a. Various answers, for example: The acrobat lost her balance and fell lightly to the floor  
8a. Various answers, for example: She yawned sleepily but she still kept working.  
9a. No. The adverb needs to come after the verb 'wait' e.g. They didn't have to wait long for the sun to come up and for a new day to begin.

### Application and Reasoning Using Adverbs in Sentences

#### Developing

- 1b. Various answers, for example: The wind blew gently.  
2b. Various answers, for example: The dragon roared loudly.  
3b. No. The adverb 'nearly' needs to come after the verb 'are' e.g. The teachers at my school are nearly all men.

#### Expected

- 4b. Various answers, for example: The girl spoke sadly about her trip to the park when she went to see her grandma.  
5b. Various answers, for example: We set off to the airport early when we flew to Majorca.  
6b. No. The adverb 'excitedly' needs to come after the verb 'laughed' e.g. The family laughed excitedly because they were going on holiday.

#### Greater Depth

- 7b. The dog lay uncomfortably in the new basket that his owners had bought him.  
8b. Various answers, for example: Do not run recklessly or you might hurt yourself.  
9b. Yes. The adverb 'sneakily' has been placed correctly after the verb 'crept'.



## Task 1

Reasoning and Problem Solving  
Count Vertices on 2D ShapesDeveloping

- 1a. Isaac has  $3 + 4 + 0 = 7$  vertices. Joshua has  $5 + 3 + 4 = 12$  vertices. Joshua has the most number of vertices.  
 2a. Fewer than 5 vertices: C, D and E  
 5 or more vertices: A and B  
 3a. Courtney is correct. A triangle has 3 vertices and a hexagon has 6 vertices.  $3 + 6 = 9$

Expected

- 4a. Gabriel has  $4 + 5 + 0 = 9$  vertices. Sean has  $3 + 4 + 3 = 10$  vertices. Sean has the most number of vertices.  
 5a. Fewer than 5 vertices: A and E  
 5 or more vertices: B, C and D  
 6a. Cian is incorrect. A triangle has 3 vertices and a pentagon has 5 vertices.  $3 + 3 + 5 = 11$

Greater Depth

- 7a. Jon has  $5 + 9 + 0 = 14$  vertices. Alice has  $4 + 8 + 6 = 18$  vertices. Alice has the most number of vertices.  
 8a. Fewer than 5 vertices: triangle and square; 7 or more vertices: hexagon, octagon; pentagon cannot be sorted.  
 9a. Courtney is incorrect. A triangle has 3 vertices and an octagon has 8 vertices.  $3 + 3 + 3 + 8 = 17$

Reasoning and Problem Solving  
Count Vertices on 2D ShapesDeveloping

- 1b. Lucy has  $4 + 4 + 8 = 16$  vertices. Isabel has  $5 + 5 + 3 = 13$  vertices. Isabel has the fewest number of vertices.  
 2b. Fewer than 6 vertices: A, C and E  
 6 vertices or more: B and D  
 3b. Jamie is not correct. A rectangle has 4 vertices and a pentagon has 5 vertices.  $4 + 5 = 9$

Expected

- 4b. Lily has  $8 + 5 + 0 = 13$  vertices. Karen has  $4 + 3 + 4 = 11$  vertices. Karen has the fewest number of vertices.  
 5b. Fewer than 6 vertices: A, C and E  
 6 or more vertices: B and D  
 6b. Jal is correct. A rectangle has 4 vertices and a triangle has 3 vertices.  $4 + 4 + 3 = 11$

Greater Depth

- 7b. Sameena has  $8 + 8 + 5 = 21$  vertices. Polly has  $12 + 12 = 24$  vertices. Sameena has the fewest number of vertices.  
 8b. Various answers, for example: fewer than 5 vertices; more than 4 vertices and fewer than 7 vertices.  
 9b. Jamie is incorrect. A rectangle has 4 vertices and a pentagon has 5 vertices.  $4 + 4 + 10 = 18$

## Task 2

Reasoning and Problem Solving  
Count Faces on 3D ShapesDeveloping

- 1a. C. It is the only shape with a curved surface.

2a.

Name	Number of flat faces	2D shape of faces
cone	1	circle
cuboid	6	square rectangle
triangular-based pyramid	4	triangle

- 3a. 2 cuboids have the greatest number of flat faces (12 in total).  
 3 cylinders = 6 flat faces

Expected

- 4a. B. It does not have a square face.

5a.

Name	Number of flat faces	2D shape of faces
cylinder	2	circle
triangular prism	5	rectangle triangle
cone	1	circle

- 6a. 3 cuboids have the greatest number of flat faces (18 in total).  
 3 triangular prisms = 15 flat faces; 1 sphere = 0 flat faces

Greater Depth

- 7a. A. It is the only shape with a curved surface.

8a. Various answers, for example:

Name	Number of flat faces	2D shape of faces
triangular-based pyramid	4	triangle
triangular prism	5	triangle rectangle
cube	6	square

- 9a. 4 triangular prisms have the greatest number of flat faces (20 in total).  
 3 triangular-based pyramids = 12 flat faces; 3 square-based pyramids = 15 flat faces; 2 cuboids = 12 flat faces

Reasoning and Problem Solving  
Count Faces on 3D ShapesDeveloping

- 1a. B. It has 6 flat faces the other shapes have 5.

2a.

Name	Number of flat faces	2D shape of faces
cube	6	square
cone	1	circle
cylinder	2	circle

- 3a. 2 square-based pyramids have the greatest number of flat faces (10 in total).  
 2 triangular-based pyramids = 8 flat faces

Expected

- 4b. D. It has no curved surfaces.

5b.

Name	Number of flat faces	2D shape of faces
square-based pyramid	5	square triangle
cuboid	6	rectangle square
triangular-based pyramid	4	triangle

- 6b. 4 triangular-based pyramids have the greatest number of flat faces (16 in total).  
 2 cubes = 12 flat faces; 5 cylinders = 10 flat faces

Greater Depth

- 7b. C. It has an odd number of faces.

8b. Various answers, for example:

Name	Number of flat faces	2D shape of faces
square-based pyramid	5	square triangle
cone	1	circle
cylinder	2	circle

- 9b. 3 cubes have the greatest number of flat faces (18 in total).  
 8 cylinders = 16 flat faces; 3 triangular-based pyramids = 12 flat faces; 2 triangular prisms = 10 faces



### Task 3

#### Reasoning and Problem Solving Sort 3D Shapes

##### Developing

1a. Ben is incorrect because the cylinder has flat faces and a curved surface. It belongs in the intersection.

2a. Various answers, for example: vertices/no vertices; flat/curved surface

3a. Various answers, for example: No vertices; curved surface

##### Expected

4a. Harvey is correct because the square-based pyramid has both rectangular and triangular faces but the other shapes have one or the other.

5a. Various answers, for example: curved surface/no curved surface; rectangular face/no rectangular face; 8 vertices/fewer than 8 vertices

6a. Various answers, for example: triangular and rectangular face

##### Greater Depth

7a. Alina is incorrect because the square-based pyramid has both an odd number of faces and an odd number of vertices so belongs in the intersection.

8a. Various answers, for example: more than 5 faces/fewer than 5 faces

9a. Various answers, for example: odd number of vertices; triangular faces

#### Reasoning and Problem Solving Sort 3D Shapes

##### Developing

1b. Isla is incorrect because the cone will roll on its curved surface, but slide on its base. It belongs in the intersection.

2b. Various answers, for example: curved surface/flat face; will roll/will slide

3b. Various answers, for example: odd number of edges; odd number of flat faces

##### Expected

4b. Jessica is incorrect because the cuboid belongs in the intersection as it has an even number of faces and vertices and the square-based pyramid has 5 vertices and 5 faces so cannot be sorted into the Venn diagram.

5b. Various answers, for example: curved surface/no curved surface; odd/even number of faces, edges or vertices

6b. Various answers, for example: can roll; fewer than 4 faces; curved face

##### Greater Depth

7b. Kai is incorrect because the square-based pyramid has an even number of edges and an odd number of vertices so belongs in the intersection.

8b. Various answers, for example: even number of edges/odd number of edges

9b. Various answers, for example: can stack; even number of edges

### Task 4

#### Reasoning and Problem Solving Make Patterns with 3D Shapes

##### Developing

1a. cylinder, cuboid

2a. The cone is hidden because there are 2 different shapes in the pattern and the first shape is a cone, so the third shape will also be a cone.

3a. Elle is correct because there are 2 different shapes in the pattern and the first shape is a sphere, so the third shape will also be a sphere.

##### Expected

4a. sphere, small cone, large cone

5a. The square-based pyramid and cylinder are hidden because there are 3 different shapes in the pattern and the second shape is a square-based pyramid and the third shape is a cylinder. This means that the fifth shape is a square-based pyramid and the sixth shape is a cylinder.

6a. Tia is correct because there are 3 different shapes in the pattern and the third shape is a small cylinder, so the ninth shape will also be a small cylinder.

##### Greater Depth

7a. cone, cube, cylinder

8a. The sphere and small cylinder are hidden because there are 3 different shapes in the pattern and the fifth shape is a sphere and a sixth shape is a small cylinder. This means that the second shape is a sphere and the third shape is a small cylinder.

9a. Isaac is correct because there are 3 different shapes in the pattern and the second shape is a triangular prism, so the eleventh shape will also be a triangular prism.

#### Reasoning and Problem Solving Make Patterns with 3D Shapes

##### Developing

1b. sphere, pyramid

2b. The pyramid is hidden because there are 2 different shapes in the pattern and the first shape is a pyramid, so the fifth shape will also be a pyramid.

3b. Ali is correct because there are 2 different shapes in the pattern and the first shape is a cuboid, so the fifth shape will also be a cuboid.

##### Expected

4b. cuboid, pyramid, cylinder

5b. The cube and cone are hidden because there are 3 different shapes in the pattern and the third is a cube and the first shape is a cone. This means that the sixth shape is a cube and the seventh shape is a cone.

6b. Cheng is correct because there are 3 different shapes in the pattern and the first shape is a pyramid, so the tenth shape will also be a pyramid.

##### Greater Depth

7b. small pyramid, cylinder, large pyramid

8b. The cube and small cuboid are hidden because there are 3 different shapes in the pattern and the fourth shape is a cube and the fifth shape is a small cuboid. This means that the first shape is a cube and the second shape is a small cuboid.

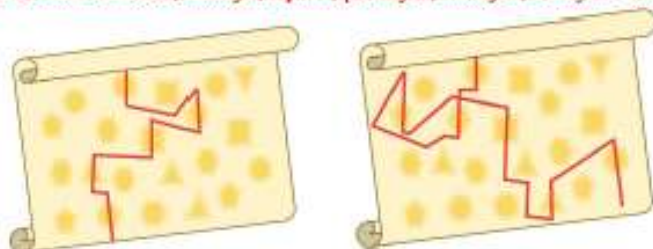
9b. Alice is correct because there are 3 different shapes in the pattern and the third shape is a triangular-based pyramid, so the twelfth shape will also be a triangular-based pyramid.

Task 5

Reasoning and Problem Solving – Properties of Shape – Year 2

1.	Name of Shape 1	Name of Shape 2	Name of Shape 3	Name of Shape 4	Name of Shape 5	Name of Shape 6
	Circle	Square	Octagon	Triangle	Pentagon	Hexagon

2. Routes may vary but must only pass through shapes via a line of symmetry and in order of number of sides i.e. circle, triangle, square, pentagon, hexagon, octagon. Example routes:



3. Lines matched as image below:



4. Children may write instructions in any order. The cone will fit in the circle. The square based pyramid and the cube will fit in the square hole. The hexagonal based pyramid will fit in the hexagon. The triangular prism will fit in the rectangular hole.

5. Children should use 2D shapes to create a animal picture such as the example given.

6.	Cat	Triangle
	Moose	Pentagon, Square-based pyramid
	Monkey	Hexagon, Pentagonal-based pyramid, Triangular prism
	Lion	Square, Pyramid
	Leopard	Heptagon, Hexagonal based pyramid

7.

Cube, Cone, Cuboid  
Triangular Prism,  
Hexagonal-Based  
Pyramid, Sphere

Cube = 6 faces  
Cone = 2 faces  
Triangular-Based Pyramid = 4 faces

Cuboid = 6 faces  
Sphere = 1 face  
Triangular Prism = 5 faces

8. Pack the cuboids and cubes first to create a flat, stable base, then the cylinders with their circular faces down to maintain the flat surface. The square based pyramids can go on top or amongst the cylinders.