

# Year 6 Home Learning Pack

Week 5 – Monday 31<sup>st</sup> January 2022 - Friday 4<sup>th</sup> February 2022

	English	Maths	Wider Curriculum	PE
<b>Monday</b>	WCR - LO. Answer reading comprehension questions. English- Use semi-colons.	LO. Find a rule-one step	Science LO: Investigate micro-organisms  <a href="#">What is a microorganism? - BBC Bitesize</a>	<p><b>Choose from:</b></p> <p><b>Joe Wicks</b> <a href="https://www.youtube.com/user/thebodycoach1">https://www.youtube.com/user/thebodycoach1</a></p> <p><b>Daily Mile</b></p> <p><b>Pupil Home Access Login – 5 a day TV</b> <i>Username:</i> clifton-primary-school-b128ly-home <i>Password:</i> LZYZ6bVd</p>
<b>Tuesday</b>	WCR - LO. Answer reading comprehension questions. English- Use semi-colons.	LO. Find a step-two rules.	DT LO: Research why people drink coffee and where it comes from	
<b>Wednesday</b>	WCR – LO. Answer reading comprehension questions. English – Identify features of a playscript.	LO. Forming expressions.	DT: LO: Research the coffee making process	
<b>Thursday</b>	WCR – LO. Answer reading comprehension questions. English – Perform a playscript.	LO. Substitution.	RE LO: Explore the moral courage involved in the Sikh tradition (Amrit ceremony)  <a href="https://www.bbc.co.uk/newsround/43737417">https://www.bbc.co.uk/newsround/43737417</a>	
<b>Friday</b>	WCR – LO: <b>Reading for pleasure</b>  English – Answer questions about a playscript.	LO. Formulae.	French LO: Months  <a href="#">French Months Of The Year Song (Remix) - Les Mois de l'Année - Los Meses del Año en Frances - - YouTube</a>	

## Year 6 Home learning

### Week beginning Monday 31<sup>st</sup> January 2022

**How to use your home learning pack:** The home learning pack contains work for you to complete during the week and it covers the whole curriculum.

The **timetable** sets out the activities for each day. Please try and complete the lessons for each day while you are at home.

**TOP TIP:** Every time you complete a lesson cross it off the timetable.

**Maths:** Please watch the video before completing the worksheet. The link for the video is on the timetable and on the worksheet. The video will explain and teach you the lesson. It will also help you complete the worksheet.

**Extra Maths Support:** Some lessons may be tricky; these extra sheets help you practise your fluency skills a little more.

**Math Challenges** – Challenge yourself with the varied fluency, reasoning and problem-solving question.

**Reading for Pleasure** – please try and find the time to read and enjoy a book!

**Reading Success Criteria:** Use the success criteria to help you answer the reading comprehension questions. **Extra Reading Support** – a quick activity to support your skills.

<b>Simple retrieval</b> <ul style="list-style-type: none"><li>• Read the question carefully.</li><li>• Identify the key word/words.</li><li>• Find the section in the text.</li><li>• Scan for the key word/words.</li></ul>	<b>Multiple Choice</b> <ul style="list-style-type: none"><li>• Read the choices.</li><li>• Find the section in the text.</li><li>• Cross out the answers that are wrong.</li><li>• Choose the answer that is left.</li></ul>
<b>Inference</b> <ul style="list-style-type: none"><li>• Read the question carefully.</li><li>• Think about what you have read and what you now know.</li><li>• Find the <b>evidence</b> in the text that support what you are saying.</li></ul>	<b>Find evidence</b> <p>I think that _____.</p> <p>this is because the text says _____.</p>
<b>Find and copy one word</b> <ol style="list-style-type: none"><li>1. Find the paragraph.</li><li>2. Read the paragraph.</li><li>3. Find the word.</li><li>4. Replace the word in the text and test it!</li><li>5. THINK: Does it make sense?</li></ol>	<b>Closest meaning</b> <ul style="list-style-type: none"><li>• Find the sentence in the text.</li><li>• Read around the sentence.</li><li>• Replace the sentence with each option.</li><li>• THINK: What is happening in the text?</li></ul>

**The Year 6 teachers on Twitter!** If you would like to share what you have done, find us on:  
@SChoudurybegum @MrsJabeen81

**Please continue to use Times Tables Rockstars!** Watch out for new battles for you to compete in. <https://trockstars.com/>

**Parents:** Please establish a timetable that suits you and your family. Try to stick to a daily routine and use the timetable/schedule to help children keep on top of their daily learning. Children should take regular breaks and if possible encourage them to get some fresh air/exercise.

#### **Websites you will need:**

**J2E How to use J2E:** <https://youtu.be/5ksB0r3oPuU>

Log into J2E: <https://www.j2e.com/>

#### **Pupil Home Access Login – 5 a day TV**

Username: [clifton-primary-school-b128ly-home](#)

Password: [LZYR6bVd](#)

WCR Day 1:

Watch these videos of Hamlet. Then use the videos to help you answer the questions.

[Part 1 'Hamlet' by William Shakespeare \(adapted by Andrew Matthews & Tony Ross\) - YouTube](#)

[Part 2 'Hamlet' by William #Shakespeare \(adapted by Andrew Matthews & Tony Ross\) - YouTube](#)

These questions are based on pages 32- 39.

1. Look at page 32. How do you know that Mother did not want to listen to what Hamlet had to say?

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2. Look at page 33. What suggests that Hamlet intended to kill whoever was behind the curtain?

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3. Read page 34. How can you tell that Claudius was happy at this point in the story?

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4. Read page 36. How do you know that Claudius did not want Hamlet to come back from England?

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5. Read page 39. How can you tell that Hamlet felt defeated?

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WCR Day 2:

Watch these videos of Hamlet. Then use the videos to help you answer the questions.

[Part 3 'Hamlet' by William #Shakespeare \(adapted by Andrew Matthews & Tony Ross\) - YouTube](#)

[Part 4 'Hamlet' by William #Shakespeare \(adapted by Andrew Matthews & Tony Ross\) - YouTube](#)

These questions are about pages 40-48.

6. Do you think Hamlet expected to be rescued by Danish pirates? Explain your answer referring to the text.

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7. Look at page 41. What time of day do you think Hamlet wrote the letter to Horatio and his mum? Explain your answer referring to the **picture**.

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8. Read page 43. How do you think Hamlet felt when he saw Horatio? Explain your answer making reference to the text.

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9. Do you think Hamlet was upset by the news about Ophelia? Explain your answer referring to page 44.

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10. Read page 48. How do you think Hamlet felt as he prepared to fight Laertes? Explain your answer making reference to the text.

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WCR Day 3:

These questions are based on pages 49-55.

11. On page 49, what evidence is there that Laertes is not fighting as well as he usually does?

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12. Read page 51. How do you think Claudius feels when he sees his wife drinking the cup of wine? Explain your answer using evidence from the text.

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13. What evidence is there that Laertes is angry on page 53?

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14. On page 53, why do you think Hamlet's fingers were 'wet with blood'?

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15. 'A pain like fire burns against my palm..', 'The pain in my hand is fierce, throbbing into my forearm...'  
Explain what this description suggests about the kind of pain Hamlet is experiencing.

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WCR Day 4:

Now you have read the whole of Hamlet. Answer the following questions:

1. Do you think Hamlet's father was really killed by Claudius? Explain your answer making reference to the text.

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2. What do you think will happen to Claudius next? Make reference to the text in your answer.

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WCR Day 5: Reading for pleasure

**Choose a book from home, or your accelerated reader book and spend 30 minutes reading it. Discuss what you have read with an adult at home.**

# Semi-colons

Semi-colons are used to separate two main clauses that are clearly related to each other but could stand on their own as sentences. They can be used to replace a conjunction, e.g.

I have a rugby match next week **and** I really hope we win.

I have a rugby match next week; I really hope we win.

1. Circle the conjunction in each sentence below.

1. I am starving so I can't wait until dinner.
2. Sam was desperately tired and he wanted to go home to bed.
3. It was pouring outside so I needed to bring my umbrella to school today.
4. Fiona went to meet her friend at the airport because she hadn't seen her for ages.
5. My team are at the top of the league so I expect we will win our match today.

2. Choose two of the sentences above and rewrite them by replacing the conjunction with a semi-colon.

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3. Draw lines to match the two related clauses that have been separated by a semi-colon.

It was getting very late;

he was more of a night-owl.

The snow started to fall;

he ate it every day.

Larkin did not like getting up early;

Timothy decided to go to bed.

Yan loved dark chocolate;

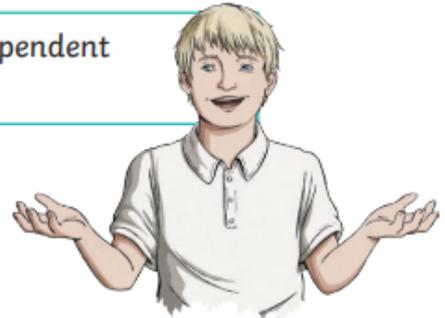
his friend had invited him and two friends.

Claude went to a trampoline party;

the sky was as white as a sheet.

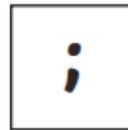
# Using Colons and Semi-Colons

Did you know that you can use a semi-colon to join two independent but related clauses?

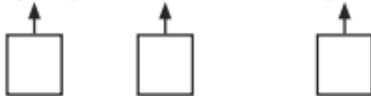


## Using Semi-Colons

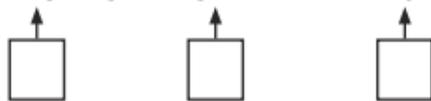
In the following sentences, draw a semi-colon (;) in the correct position.



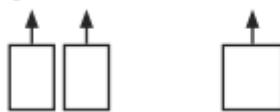
1. Not today my head was already spinning.



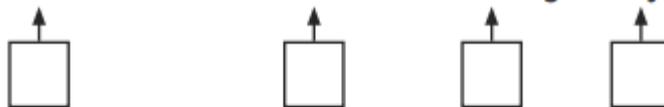
2. But I wasn't going to cry I was too old for that.



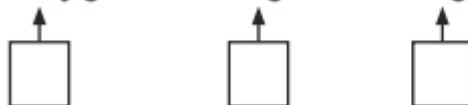
3. We don't really hit each other we just pretend.



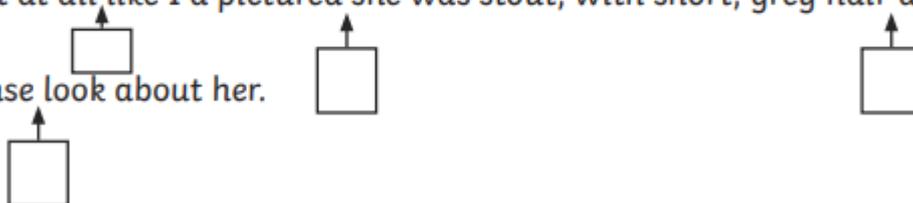
4. Then I'd remembered that those clothes didn't exist they were just dream clothes.



5. "It's the middle of your exams you have to go."



6. She wasn't at all like I'd pictured she was stout, with short, grey hair and a no-nonsense look about her.



## English Lesson 3

## LO: Identify features of a playscript

[Plays - KS2 English - BBC Bitesize](#)

**TASK: Look at the lost of features of a playscript.**

**Read the playscript below find the features and tick the checklist.**

included a cast list?	
included a props and costumes list?	
used a narrator?	
put the speakers' names on the left?	
written dialogue without speech marks?	
structured my play using scenes?	
written stage directions in brackets?	
considered how the play will be performed?	
used standard and non-standard English appropriately?	
used punctuation effectively?	

# Recognising Features of a Play Script

Read the following extract from the Little Red Riding Hood play script. Use coloured pencils to find examples of the following features in the text:

Narrator

Stage directions

Scene number

Theatre words

Brackets/parenthesis

Description of setting

## Scene 1 – Mother's Kitchen

*Lights up. The narrators, Big Rabbit and Little Rabbit, stand downstage.*

Little Rabbit: Big Rabbit, Big Rabbit, is it time for a story?

Big Rabbit: What story would you like?

Little Rabbit: Do you know the story of Little Red Riding Hood?

Big Rabbit: *(excited)* Of course I do! Let me just think how it begins. Ah yes, I remember!

*Lights up on a cottage on the outskirts of a great forest. It is a spring day.*

Big Rabbit: Once upon a time – and a very fine time it was – a girl called Red lived with her mother, in a cottage on the outskirts of a great forest.

*Mother takes a batch of fresh cupcakes from the oven and places them on the table.*

Mother: Little Red! *(bangs the rolling pin on the table)* Little Red! Time to get up.

Red: *(offstage)* Coming, Mother!

*Mother looks up at the clock (it's noon) and taps her foot angrily. Red enters the kitchen in a red cape. Seeing the cupcakes, she reaches out to take one, but her hand stops as Mother turns to glare.*

Red: These smell delicious. *(backing away)* You've been busy, Mother. Who are they for?

**Narrator**

**Stage directions**

**Scene number**

**Theatre words**

**Brackets/parenthesis**

**Description of setting**

Mother: They're for Granny, so keep your mucky fingers off. I didn't raise you to steal from little old ladies. Why, your poor granny lives alone in the forest, surrounded by fearsome creatures. The least I can do is bake her a cupcake or two every now and then.

Red: *(rubbing her tummy)* I wouldn't dream of touching Granny's cupcakes.

*Mother piles the cupcakes into a wicker basket, then puts her hands on her hips.*

Mother: *(huffing)* Now, you're to take this basket straight to Granny's. No dilly-dallying, keep to the path, and never ever talk to strangers. Do you hear me?

Red: *(sighing)* Yes, Mother.

*Red takes the basket and hurries from the kitchen.*

Big Rabbit: And with that, Little Red Riding Hood hurried from the kitchen into the glorious spring sunshine.

*Lights down.*

## English Lesson 4

### LO: Perform a playscript

**TASK: Read and perform the playscript below. Remember to be expressive!**

# Māui and the Sun

## Characters

- Narrator
- Māui
- Māui Mua (Māui the Firstborn)
- Māui Roto (Māui to the Inside)
- Māui Taha (Māui to the Side)
- Māui Waho (Māui to the Outside)
- Tamanuiterā - The sun
- Whanau members/villagers

## Props

- Campfire (torch and coloured cellophane or paper)
- Jawbone
- Flax
- Ropes
- Net



## Scene 1

**Narrator:** A long, long time ago, when Aotearoa was still young, there lived a clever demigod named Māui. Every night, around the fire, Māui's brothers would complain about the sunlight.

**Māui Mua:** I tried to go fishing today and again the sun moved so fast that there was no light and I couldn't see my hook to put bait on.

**Māui Roto:** My whanau are so hungry, I haven't had enough light to go hunting for their kai.

**Māui Taha:** I keep trying to do my chores but it is too hard in the dark.

**Māui Waho:** Tino! (I agree, in Te Reo)

**Māui:** (standing up) I, Māui, can tame the sun!

**All brothers:** (laughing)

**Māui Waho:** You cannot catch the sun Māui, he is too powerful.

**Māui Taha:** The heat and flames would burn you to death.



**Māui:** You have seen me fish up our land, nothing is impossible. I will use the jawbone of my ancestor, Muri-ranga-whenua, and with your help, we will slow the sun.

**All brothers:** OK Māui, we'll help.

**Narrator:** The brothers knew that if anyone could capture the sun it would be Māui.

## Scene 2

Māui is talking to his family and villagers, they are sitting by him.

**Māui:** Whanau, we must collect as much harakeke as possible, then weave it into strong ropes.

**Māui Mua:** Hoake, let's go!

**Whanau/villagers:** We will help you, Māui!

**Narrator:** The brothers, Māui's whanau and the villagers started collecting flax, and weaving it into long strong ropes. After days of collecting and weaving, they finally had enough ropes.

**Māui:** Kapai everyone, look at all of these strong ropes! Now I will tie them together to make a gigantic net, big enough to catch the sun.

**Narrator:** While the people slept, Māui sat tying knot after knot right through the long, dark night.



**Māui:** I will now say the magical karakia taught to me by my ancestors. This will make the net as strong as a thousand men.

**Narrator:** Māui quietly chanted his karakia as the sun rose and the villagers awakened.

**Māui Roto:** Māui, are we ready to start our long journey east to where the sun first rises?

**Māui:** Yes brothers, it will be a long and difficult journey but with our ancestors watching over us I know we will make it.

### Scene 3

The brothers and Māui are all hiding in caves or behind trees looking towards a giant pit.

**Narrator:** Finally, Māui and his brothers arrived at a huge, deep pit. Inside Tamanutierā, the sun, was sleeping. Māui and his brothers hid in caves and behind trees.

**Māui:** (whispering) Turituri! The sun is beginning to wake up.

**Narrator:** It wasn't long before they felt the warmth of the sun and saw the first glint of light.



**Māui Mua:** (whispering) Why are we doing this?

**Māui Taha:** We'll be burnt alive!

**Māui:** Pull on the ropes, pull as hard as you can!

**All brothers:** Aue we will!

**Tamanuiterā:** Hey you kikino! What are you doing?

**Narrator:** Māui started chanting his magical karakia, asking his ancestors for their strength.

**Tamanuiterā:** I am stronger than you Māui, no net will trap me!

**Narrator:** Māui knew he had to do something more so he jumped at the sun, attacking it with his magical jawbone. The magic hit the sun like a bolt of lightning.

**Tamanuiterā:** Why are you hurting me?

**Māui:** You fly too quickly across the sky, we never have enough time in the day to do all of our work.

**Narrator:** Tamanuitera struggled to get free but Māui again showed him the power of the jawbone.

**Māui:** If we release you, will you promise to fly slowly across the sky and give us more daylight?

**Tamanuitera:** I give up! Your magic is too strong for me. I will slow down.

**Māui Taha:** Let go of the ropes.

**Narrator:** The sun rose slowly up into the sky. The brothers all smiled at Māui with pride. They knew he had proved them wrong again.

**Māui Waho:** Māui, we will never question your knowledge and power again!

**Māui Waho:** Māui, we will never question your knowledge and power again!

**Māui Mua:** You have tamed the sun and given us all more sunlight.

**Narrator:** From that day on, Tamanuitera flew slowly across the sky, giving man time to do all his chores. Māui was forever known as the man who could tame the sun.



## English Lesson 5

LO: Answer questions about a playscript.

# Oliver Twist

## Scene Two - An Offer for Oliver

**(Narrator stands in front of the closed stage curtains, lit solely by a spotlight.)**

**Narrator:** For a week after the sinful offence of asking for more supper, Oliver remains a prisoner in the dark and lonely room which he has been locked in by Mr Limbkins. Oliver cries bitterly all day and, when the long, dismal nights arrive, he spreads his hands in front of his eyes to shut out the darkness. He crouches in the corner and tries to sleep, despite trembling from the cold. Gloom and loneliness surround him.

As Oliver drifts in and out of sleep, Mr Gamfield arrives at the workhouse on his donkey. Taking the opportunity to rid themselves of the trouble that Oliver has caused, a man in a white waistcoat swiftly heads outside to greet the unsuspecting chimney sweep.

**(Curtains open as Narrator exits to stage right. The man in the white waistcoat casually crosses the stage to approach Mr Gamfield and his donkey, who are stood outside of the workhouse gate at stage left. The man has his hands behind him and a smug expression on his face. Both characters smile at one another as a greeting.)**

**Mr Gamfield:** This boy, sir... the one that the parish wants to apprentice...

**Man:** **(smiles patronisingly)** Yes, my man. What about him?

**Mr Gamfield:** Well, if the parish would like him to learn a very pleasant trade in a good, respectable chimney sweeping business, I want an apprentice. I'm ready to take him – just like your advert asks.

**Man:** Walk in. **(waves towards the workhouse)**

**(The man in the white waistcoat walks towards the workhouse entrance at stage right. Mr Gamfield dawdles behind him. After leaving the donkey outside, Mr Gamfield enters the workhouse. He joins the gentleman who is whispering to Mr Limbkins by the table downstage.)**

**Mr Limbkins:** It's a nasty business.

**Man:** Young boys have been smothered in chimneys before now.

**Mr Gamfield:** That's because they dampened the straw before they lit it in the chimney. That's all smoke and no blaze! Smoke isn't any use in making a boy come down the chimney; it only sends him to sleep. There's nothing like a good, hot blaze to make them come running!

*(The gentleman in the white waistcoat chuckles but quickly stops upon a stern look from Mr Limbkins. The two whisper between themselves for a few moments.)*

**Mr Limbkins:** We have considered your offer and we do not approve of it.

**Man:** Not at all. Decidedly not.

*(Mr Gamfield looks rejected. With a hunched back, he walks away from the others but pauses by the door and looks back.)*

**Mr Gamfield:** So, you won't let me have him, gentlemen?

**Mr Limbkins:** No. To say the least, it's a nasty job. We think you ought to take something less than the money we advertised.

*(Mr Gamfield's mood brightens; he straightens up with a smile on his face. He quickly heads back towards the table.)*

**Mr Gamfield:** What will you give me to take him, gentlemen? Don't be too hard on a poor man! What will you give?

**Mr Limbkins:** I should say that three pounds and ten shillings is plenty.

**Man:** That's ten shillings too much!

**Mr Gamfield:** *(eagerly)* Come on! Say four pounds, gentlemen. Say four pounds and you've got rid of him for good!

**Mr Limbkins:** *(firmly)* Three pounds ten.

**Mr Gamfield:** *(with desperation)* Come on! I'll split the difference, gentlemen. Three pounds and fifteen shillings.

**Mr Limbkins:** *(sternly)* Not a farthing more.

**Mr Gamfield:** *(looking sorrowful)* You're desperately hard on me, gentlemen.

**Man:** Nonsense! He'd be cheap with no payment at all! Take him, you silly man. He's just the boy for you. He needs discipline – it will do him good. Keeping him doesn't have to be expensive – he's been underfed since he was born! (chuckles)

(Mr Gamfield looks backwards and forwards between the two men's faces; they are both smiling. After a pause, he smiles himself. He reaches out his hand and both men shake it, sealing the deal.)

**Mr Gamfield:** I'll be back to collect him this afternoon!

(Lights dim except for one spotlight, which shines on Narrator as they enter from stage right and stand in front of the curtains as they close.)

**Narrator:** The deal has been made. At once, Mr Bumble instructs that Oliver is released from his bonds and orders him to put on a clean shirt. "Eat your food and be thankful!" he tells Oliver. "You're leaving." And so it is: Oliver Twist is to become a chimney sweep's apprentice.

(Spotlight fades. Narrator exits to stage left.)



# Questions

1. Who says the phrase, "Eat your food and be thankful!" Tick one.

- Mr Gamfield
- Mr Limbkins
- Narrator
- Mr Bumble

2. **This boy, sir... the one that the parish wants to apprentice...**

Which of these is the closest definition for the word apprentice? Tick one.

- to send someone to learn a trade
- to pay someone to do more work
- to agree that someone cannot work
- to keep someone imprisoned

3. How much money was Mr Gamfield paid to take Oliver?

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4. Find and copy **two** words or phrases from the stage directions which show that Mr Gamfield really wanted more money.

1. \_\_\_\_\_

2. \_\_\_\_\_

5. **(smiles patronisingly)**

What does this imply about the way that the man in the white waistcoat smiled?

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6. How is Oliver made to seem desperately unhappy by Narrator at the start of the extract? Discuss **two** points, using evidence from the text to support your answer.

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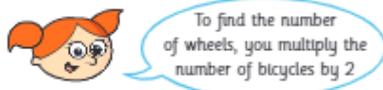
Find a rule – one step

- 1 Whitney makes a pattern of triangles using sticks. Complete the table below.



Number of triangles	1	2	3	4	5	10	
Number of sticks							90

- 2 Complete the tables.



a)

Number of bicycles	1	2	5			16
Number of wheels	2			18	24	

b)

Number of ants	1	2	5			16
Number of legs		12		18	24	

Explain how to find the number of legs.

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- 6 Calculate the missing inputs and outputs for the function machine.

Input	8		5.5		Output		14		8
		+10							

- 7 Look at the function machine.

Input	15		20		50	Output	65	70	100
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- a) What is the output, if the input is zero?
- b) What is the input, if the output is zero?

- 3 Calculate the outputs for the function machines below.

a)  $50 \rightarrow +5 \rightarrow$

b)  $50 \rightarrow -7 \rightarrow$

c)  $50 \rightarrow \times 2 \rightarrow$

d)  $50 \rightarrow \div 10 \rightarrow$

- 4 Calculate the inputs for the function machines.

a)  $\text{Input} \rightarrow +9 \rightarrow 45$

b)  $\text{Input} \rightarrow -2 \rightarrow 21$

c)  $\text{Input} \rightarrow \times 10 \rightarrow 350$

d)  $\text{Input} \rightarrow \div 3 \rightarrow 9$

- 5 Write the missing functions in the function machines.

a)

Input	2		5		10	Output	10	25	50
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b)

Input	8		0		-3	Output	15	7	4
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- 8 Here is a function machine.

Input	6		Output	15
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Dora: The rule is add 9

Dexter: The rule is multiply by 2.5

Who do you agree with? \_\_\_\_\_

Explain your answer.

- 9 In a function machine, if the input is 3 and the output is 12, what could the function be? Write two different functions and complete the table of outputs for each function.

Input	3	4	5	10	20	100
Output	12					

Input	3	4	5	10	20	100
Output	12					

Find a rule – two step

1 Use the function machine to complete the table.



Input	1	2	3	5	10	50
Output						

2 Here is the same function machine with the steps in the reverse order.



Teddy

The outputs will be the same.



Jack

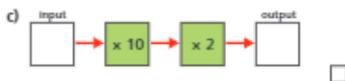
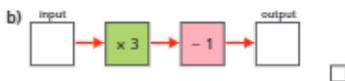
The outputs will be different.

Explain to a partner who you think is correct. Use the function machine to complete the table.

Input	1	2	3	5	10	50
Output						

Who is correct? \_\_\_\_\_

4 Tick the pairs of function machines that will give the same outputs for a given input.

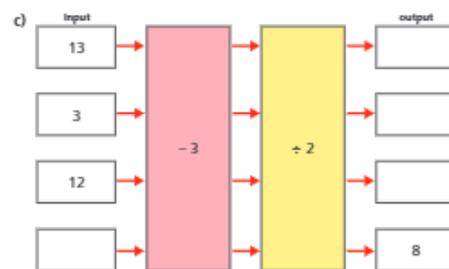
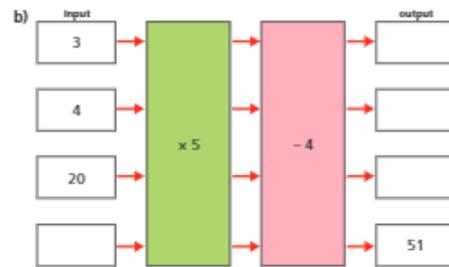
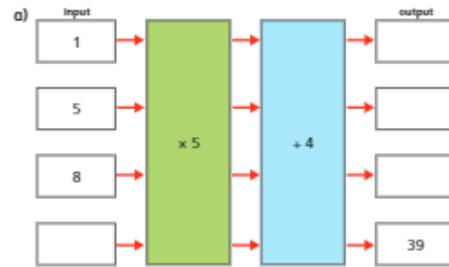


Explain your reasoning to a partner.

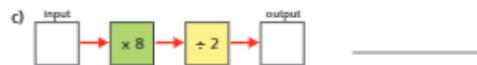
5 Here are some 2-step function machines. For each machine, write a single step that would give the same output. Check your answers by inputting values.



3 Work out the missing outputs and inputs.



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Can all 2-step function machines be written as a 1-step function machine?

Talk about it with a partner.

6 Here is a function machine.



a) Complete the table.

Input	10	3		
Output			40	280

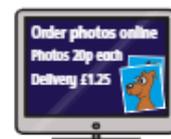
b) Rosie puts a number into the machine and she gets out the same number.

Work out Rosie's number.

7 Mr Hall and Mrs Rose order some photos online.

a) Mr Hall orders 16 photos.

How much does he pay?



b) Mrs Rose pays £6.05

How many photos did she order?

Forming expressions



- 1 Tommy uses multilink cubes to represent an unknown number and base ten ones to represent 1



Write algebraic expressions to describe the sets of cubes.  
The first one has been done for you.

- a)  $2x + 3$
- b) \_\_\_\_\_
- c) \_\_\_\_\_
- d) \_\_\_\_\_
- e) \_\_\_\_\_
- f) \_\_\_\_\_
- g) \_\_\_\_\_
- h) \_\_\_\_\_



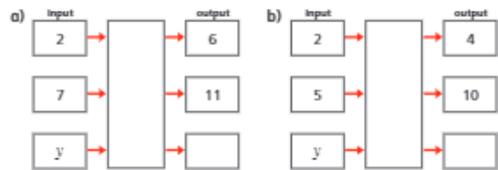
- 2 Use Tommy's method to represent these expressions.

- a)  $x + 2$
  - b)  $2x$
  - c)  $3x + 1$
  - d)  $x + 6$
- Compare answers with a partner.

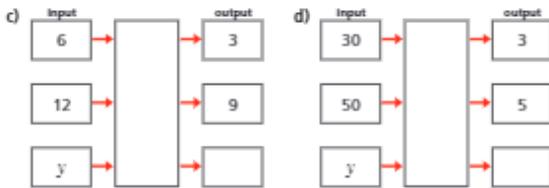
- 3 Use cubes to help you simplify the following expressions.  
The first one has been done for you.

- a)  $2y + 5 + y$   
  $3y + 5$
- b)  $3a + 2 + a + a$   
 \_\_\_\_\_
- c)  $6z + 2 - 2z$   
 \_\_\_\_\_
- d)  $m + 4 + 3m - 3$   
\_\_\_\_\_

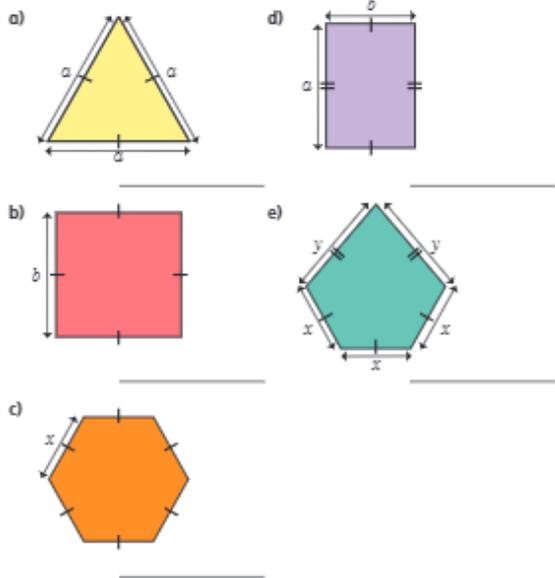
- 4 Complete the function machines.



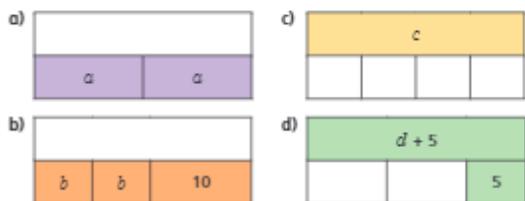
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- 6 Write an algebraic expression to represent the perimeter of each shape.



- 7 Complete the bar models.



- Match each statement to the equivalent algebraic expression.  
Write the missing statements.

5 more than y	2y
y less than 5	y - 5
y multiplied by 5	5 - y
y divided by 5	y + 5
double y	5y
	y <sup>2</sup>
	y/5

Substitution

1

 = 4     = 5

Use the given facts to work out the calculations.

a)  +  + 

b)  +  - 

c)  +  +  +  + 

2

 = 12     = 5

Use the given facts to work out the calculations.

a)  - 

b)  × 

d) Create your own calculation that will be equal to 22

3

If  $x = 5$ , write the values of the expressions in the corresponding grid. The first one has been done for you.

$3x$	$x^2$	$2x - 5$	15		
$4x + 2$	$\frac{x}{2}$	$2(x + 1)$			
$7x$	$x + 9$	$x - 7$			

4

If  $a = 10$  and  $b = 6$ , work out the values of the expressions.

a)  $a + b =$

d)  $2a + b =$

b)  $a - b =$

e)  $3a - 17 =$

c)  $2a =$

f)  $2(a - b) =$

5

If  $m = \frac{4}{5}$  and  $k = 0.1$ , work out the value of  $m + 2k$

6



It does not matter what  $p$  and  $q$  are,  $p + q$  and  $q + p$  will always give the same answer.

Mo

Do you agree with Mo? \_\_\_\_\_

Explain your answer.

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7

$m = 7$      $n = 5$

Write  $>$ ,  $<$  or  $=$  to compare the expressions.

a)  $2m$  ○  $10$

b)  $n - 1$  ○  $5$

c)  $2n + m$  ○  $2m + n$

d)  $7n$  ○  $5m$

8

$a = 10$

Write the expressions in order, starting with the smallest value.

$5a$      $a + 5$      $\frac{a}{5}$      $a^2$

9

$a = 15$

Write three different algebraic expressions that give a value of 40

\_\_\_\_\_

10

Complete the table.

$x$	$5x$	$5x - 1$
2		
10		
12		
	25	
		34
		99

Formulae



1 Scott builds a pattern using triangles and circles.



a) Draw the next diagram in the pattern.

b) Scott records the number of triangles and circles in a table. Complete the table.

Number of triangles	1	2	3	4	5
Number of circles	3				

c)  $c$  = number of circles and  $t$  = number of triangles  
Circle the formula that describes the pattern.

$c = t + 3$

$c = 3t$

$t = 3c$

$t = 3 + c$

d) How many circles will there be with 10 triangles?  
Show your working.

---



---



5 Dora makes a square pattern using lolly sticks.



She records the number of squares and sticks in a table.

a) Continue the pattern and complete the table.

Number of squares, $s$	1	2	3	4	5
Number of lolly sticks, $l$	4	7			

b)

You need 35 lolly sticks to make 10 squares. I multiplied the number needed for 2 squares by 5

Eva

Show that Eva is wrong.  
How many sticks are needed to make 10 squares?

c) Circle the formula that describes the pattern.

$l = 3s + 1$

$l = 4s + 1$

$l = 3(s + 1)$



2 a) Complete the table.

Number of weeks	1	2	3	5	10
Number of days	7				

b) Complete the formula to show the relationship between days ( $d$ ) and weeks ( $w$ ).

$$d = \square w$$

c) How many days are there in 32 weeks?

3 a) Write a formula for the area and perimeter of the rectangle.



b) Work out the area and perimeter of the rectangle if  $a = 17$  cm and  $b = 8$  cm

Show your workings.

$$\text{area} = \square \quad \text{perimeter} = \square$$

4 a) Write a formula for the area and perimeter of the square.



b) Work out the area and perimeter of the square if  $d = 8.5$  cm  
Show your workings.

$$\text{area} = \square \quad \text{perimeter} = \square$$

6 Here are a dog walker's prices.

**Walkies**  
Dog Walker

£12 per hour  
plus £5 travel

a) How much does the dog walker charge for a 2-hour job?

b) Write a formula to show the cost ( $c$ ) for ( $h$ ) hours.

---

7 The Wooden Letter Company sells wooden letters for £2 each, plus £1.50 for delivery of each order.



a) Whitney places an order for the letters to spell out her name.  
How much does it cost?

$$£ \square$$

b) Write a formula to show the cost ( $c$ ) for the number of letters ( $n$ ).

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## Science Lesson

LO: Investigate micro-organisms

We use words like 'bugs' or 'germs' but these are not scientific.

### Micro-organism!

If you can only see a living thing with a microscope, that means it is a micro-organism. These are found everywhere.



## What are micro-organisms?

Micro-organisms are very tiny living things. They are so small that you need a microscope to see them.

Micro-organisms are all around us, in the air, in our bodies and in water. Some micro-organisms are harmful to us, but others are helpful to us.

**WATCH:** [What is a microorganism? - BBC Bitesize](#)

Micro-organisms are single-celled organisms most of which are helpful or beneficial, although some of them cause illness and disease.

There are three types of micro-organism:

**viruses    bacteria    fungi**

## **Micro-organisms exist in huge numbers.**

- In one single teaspoon of garden soil, there are over 100,000 micro-organisms. In 1ltr of seawater, there are over 1bn micro-organisms.
- On your hands there are more micro-organisms than there are people in the world.
- There are so many micro-organisms, that scientists have only named 0.5% of them.
- Micro-organisms outnumber all other species and make up most of the living **matter** on the planet.

## **What can bacteria do?**

We have learnt that bacteria do many good things, such as decompose waste and give texture and flavour to food. However, they can also cause illness. They give off oxygen when they 'eat'. Half of all the oxygen in the world, comes from bacteria.

**Virus** - Come in 1000s of different shapes and sizes.

They hang about waiting to meet a 'host' which they then invade, hijacking the host's cells. Beware the air you breathe and door handles !

**Fungi** - Not just mushrooms – athlete's foot, penicillin, and yeast.

Yeast is used in bread making, and brewing

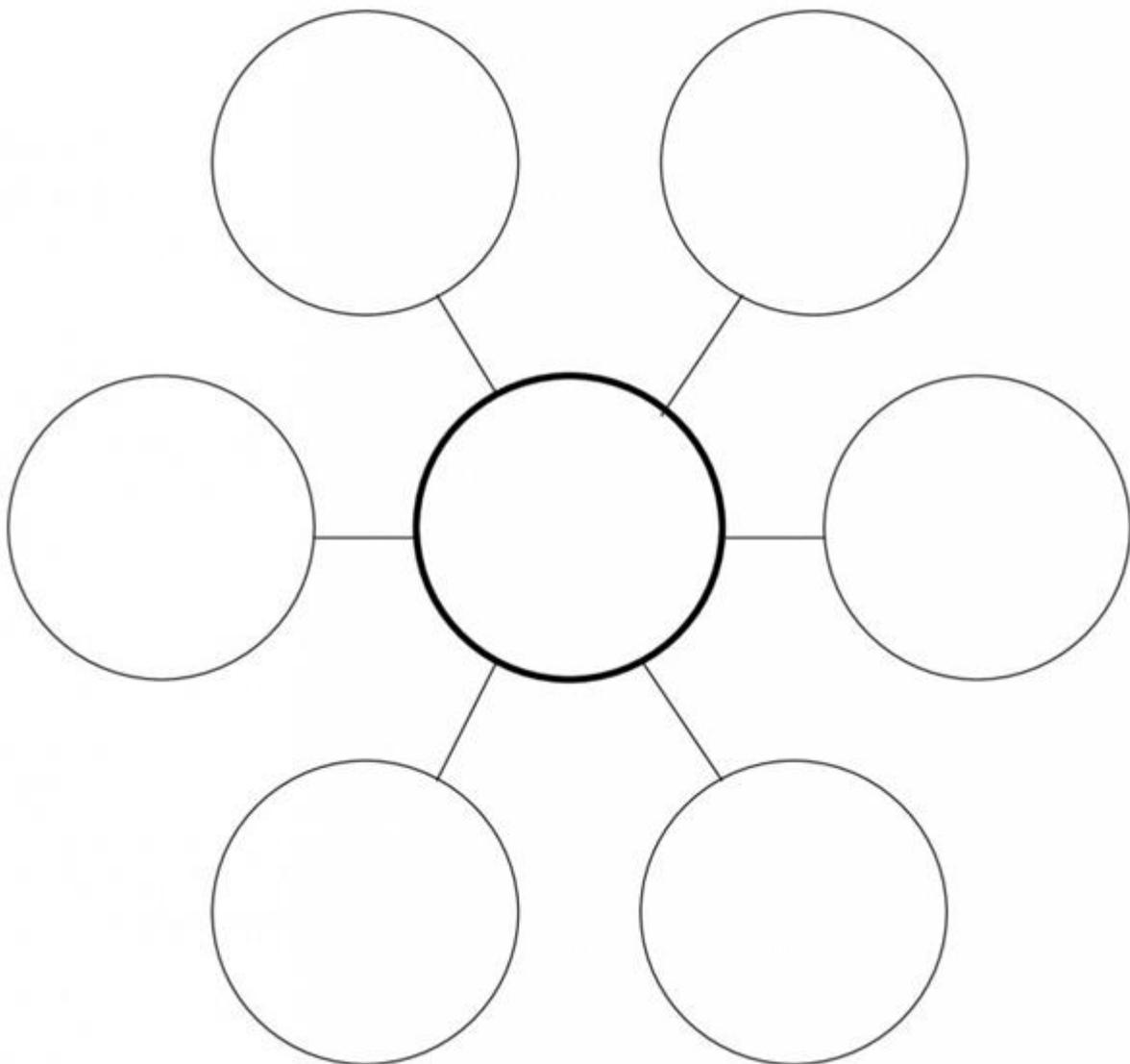
## **TASK:**

- **Task1** - focus research into **how micro-organisms are useful** in food production eg: beneficial or 'friendly' bacteria such as probiotic bacteria in yogurts. Micro-organisms are helpful in the breakdown of dead animals and plants, helping animals and humans digest foods and turning milk into yogurt, cheese and butter.
- **Task 2** - Find out **how micro-organisms can be harmful to us**. Almost 99% of bacteria are helpful. Disease is caused by only a few of them. Investigate which diseases are caused by bacteria and to focus on what we can do to prevent them from causing harm.
  - **Record under headings:**
  - **1) How micro-organisms are useful**
  - **2) How micro-organisms can be harmful**

- 3) Bonus Challenge: Advice on stopping the spread of micro-organisms
- Science Lesson

## DT Lesson 1 – How do you take your coffee?

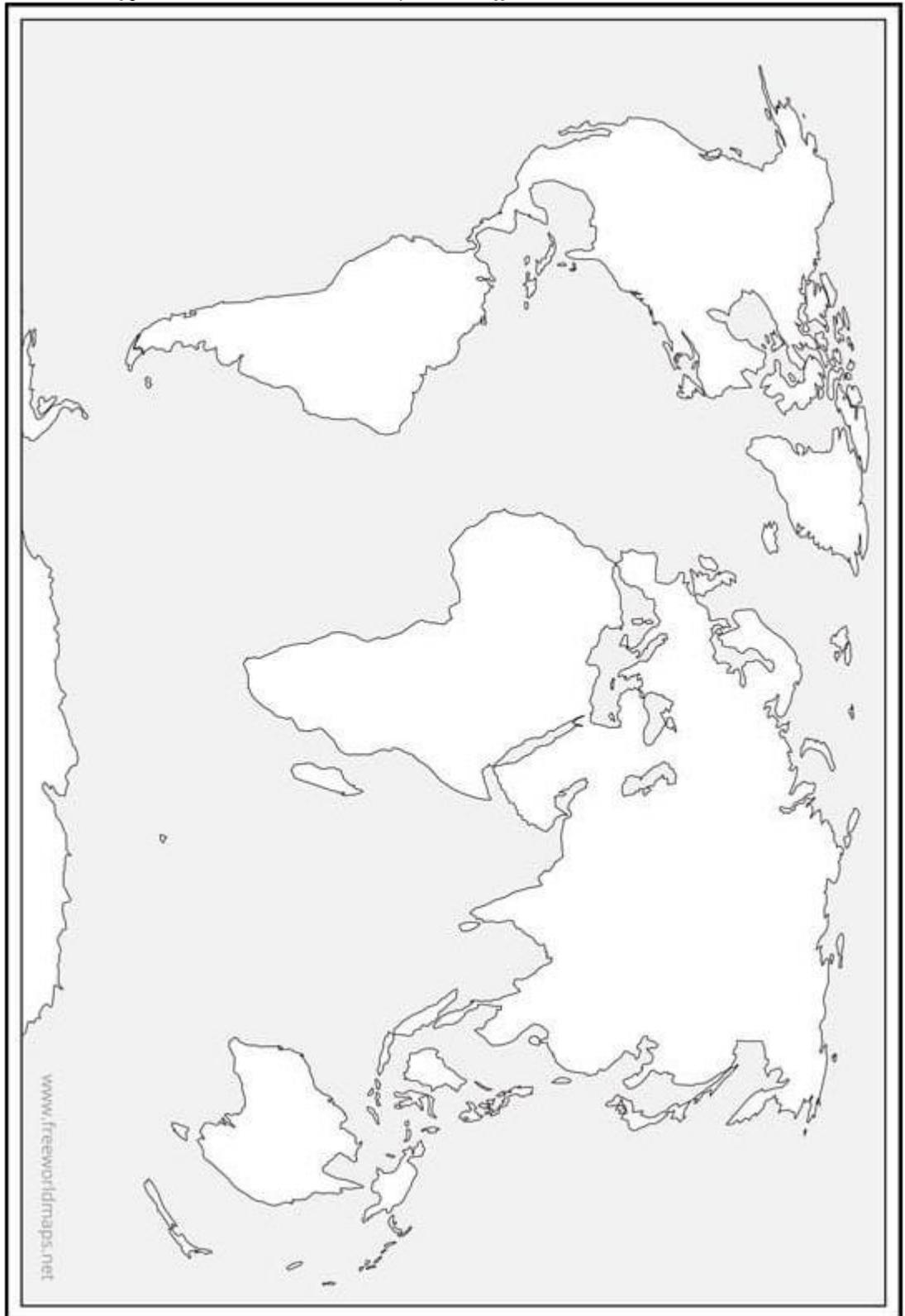
When and why people drink coffee?



What are your families favourite hot drinks?

When do they drink them?

Look at the map of the world. Identify and label the countries that produce coffee.



## DT Lesson 2 – How do you take your coffee?

LO: Research the coffee making process

### TASK 1: Research the coffee making process



Coffee cherries



Squeezing the coffee cherries.



Green coffee beans  
are roasted

Roasted coffee  
beans are crushed

Can you identify the different ways of making coffee

1.



2.



3.



4.



5.



1. How is instant coffee made?
2. Why is instant coffee popular?
3. What is caffeine?

## TASK 2: Research how coffee is made.

### Different ways of making coffee

Instant coffee	Coffee bag	Ground coffee beans
		

How are these coffees made?

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## RE Lesson

LO: Explore the moral courage involved in the Sikh tradition (Amrit ceremony)

### **WATCH:**

<https://www.bbc.co.uk/newsround/43737417>

### **What is Vaisakhi?**

Vaisakhi or Baisakhi is a Sikh festival. It celebrates the harvest, the Sikh New Year and the founding of the Sikh community, known as the Khalsa.

The first Baisakhi took place in 1699 in the month of Vaisakh.

Since then, every year, on the 13th/14th of April, many Sikhs go to their place of worship called Gurudwara.

There they join in prayers and special services which may last all day.

## **The names of the five Panj Pyare were:**

1. **Bhai Daya Singh** - first of the Panj Pyare and represented kindness.
2. **Bhai Dharam Singh** - second of the Panj Pyare and represented justice and righteousness.
3. **Bhai Mukham Singh** - third of the Panj Pyare and represented organisation.
4. **Bhai Hummat Singh** - fourth of the Panj Pyare and represented courage.
5. **Bhai Sahib Singh** - fifth of the Panj Pyare and represented majesty.

## **TASK 2: What happens today in an Amrit ceremony to remember the original events?**

During the Amrit ceremony, Sikhs make a formal oath to become a member of the Sikh brotherhood.

The ceremony ends as the initiate drinks Amrit (specially prepared holy water).

During this ceremony five older Sikhs are dressed like the Panj Pyare, as in the first Baisakhi.

They stir the Amrit in the bowl using a Khanda.

This is drunk and sprinkled on their faces.

The person promises to be a true Sikh and follow the teachings of the gurus.

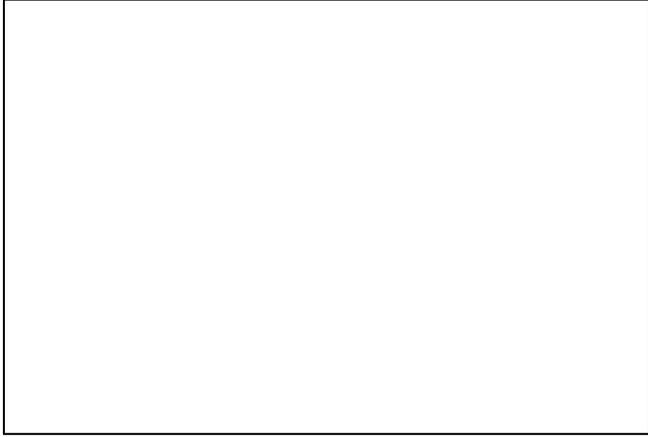
She/he will always wear the five Ks.

## **TASK 3: Research the story of Vaisakhi and create a story board of the main events.**



LO: Explore the moral courage involved in the Sikh tradition (Amrit ceremony)

Name: \_\_\_\_\_ Date: \_\_\_\_\_

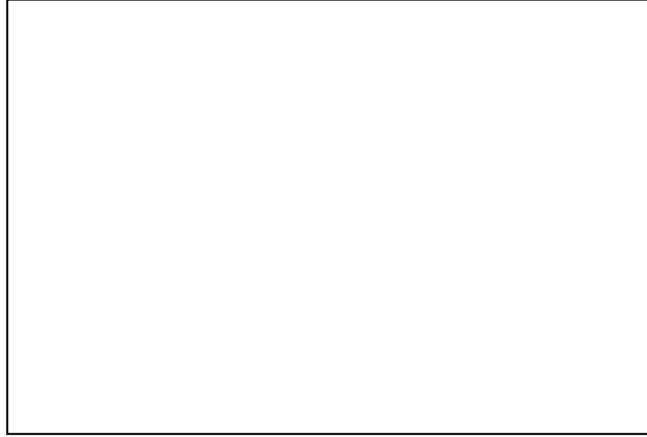


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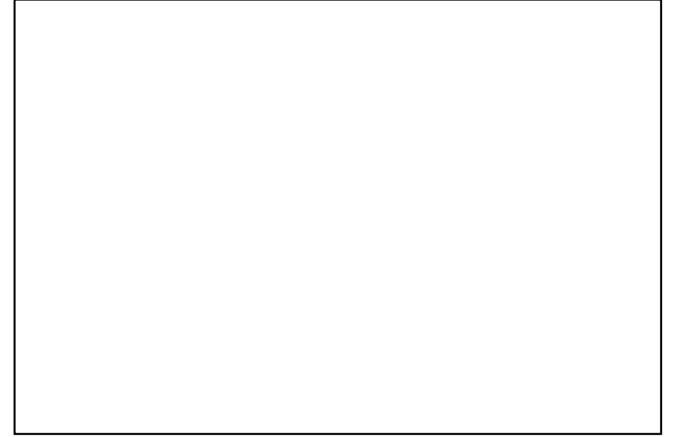


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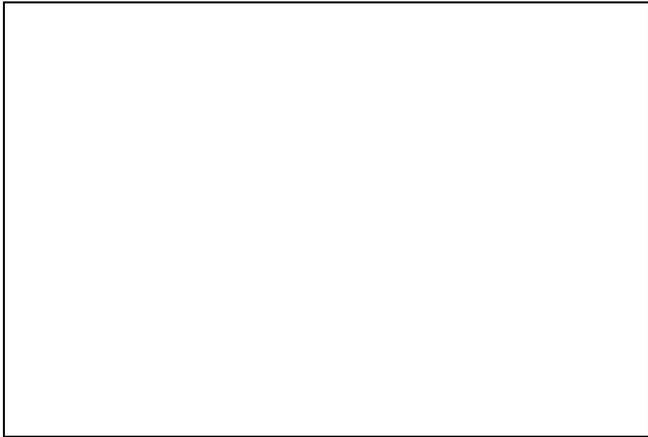


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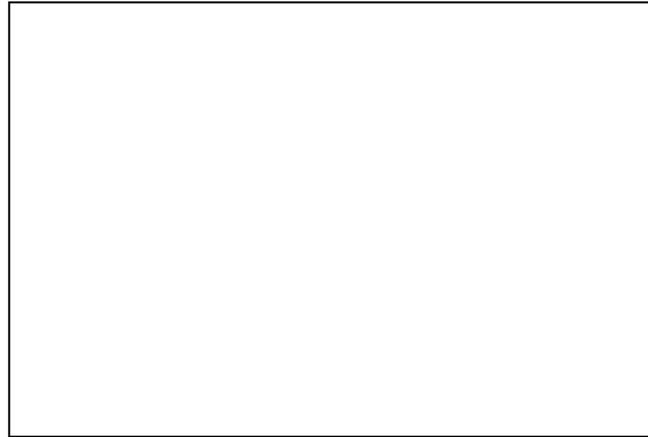


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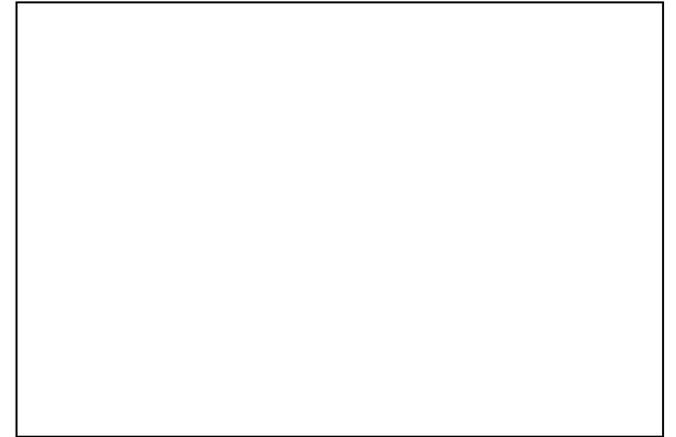


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# French Lesson

[French Months Of The Year Song \(Remix\) - Les Mois de l'Année - Los Meses del Año en Frances - - YouTube](#)

LO: Months

Name: .....

Date: .....

## Les mois / Months

**Q1** Put these words in the right order to make a French sentence.

Mon en avril  
est anniversaire



.....  
.....

en anniversaire  
est Mon août



.....  
.....

anniversaire est  
Mon mars en



.....  
.....

est anniversaire  
en juin Mon



.....  
.....

**Q2** Look at the question in the speech bubble and write an answer in French on the lines. Use the sentences above to help you.

C'est quand,  
ton anniversaire?

.....  
.....

### Now Try These

- Write a list of the French months you can make from the letters in brackets. You can use each letter once per word. ( A I J M U N V R L S )
- Make a French calendar for your classroom. Draw a picture for each month and label each picture with the correct French word.