| Daily readin | ng of a text of your | ice (e.g. may | azine, information |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8/6/20 | Maths |  | English |  |  | Foundation |
| Mon | Summer Term Week 7 L1 <br> ALTERNATIVE PLANS: Find the <br> total <br> https://wrm- <br> 13b48.kxcdn.com/wp- <br> content/uploads/2020/06/Y2- <br> Week-7-Alternative-Plan.pdf <br> Complete task sheets attached. |  | Genre Focus: Poem (Haiku) <br> Lesson 3 (we are jumping straight to this lesson but you are welcome to complete 1 and 2 if you want to as well!) - Identify syllables <br> https://www.thenational.academy/year-2/english/to-identify-syllables-year-2-wk6-3\#slide-2 <br> If you would prefer not to work online, complete 'English Activity 1'. |  |  | Science: Environment Topic <br> Read climate change slides attached and have a go at the climate change comparative test. |
| Tue | Summer Term Week 7 L2 <br> ALTERNATIVE PLANS: Find the <br> difference <br> Complete task sheets attached. |  | Genre Focus: Poem (Haiku) <br> Lesson 4 - identify the key features of a Haiku <br> https://www.thenational.academy/year-2/english/to-identify-the-key- <br> features-of-a-haiku-year-2-wk6-4 <br> If you would prefer not to work online, look at the 'Haiku Rules' poster and work through the attached slides. |  |  |  |
| Wed | Summer Term Week 7 L3 <br> ALTERNATIVE PLANS: Find change Complete task sheets attached. |  | Genre Focus: Poem (Haiku) <br> Lesson 5 - Write a Haiku poem <br> https://www.thenational.academy/year-2/english/to-write-a-haiku-year-2- <br> wk6-5\#slide-3 <br> If you would prefer not to work online, look at the 'Haiku Rules' poster and work through the attached slides. |  |  | Art: Summer art skills Sunflower fork printing (see in resource pack) |
| Thu | Summer Term Week 7 L4 <br> ALTERNATIVE PLANS: Two-step problems <br> Complete task sheets attached. |  | Reading Comprehension: The Notebook |  |  |  |
| Fri | Summer Term <br> Week 7 L5 - <br> Family Maths Challenge - on <br> Dojo |  | Grammar and Pun Homophone resou | uation: ce 1 |  | History: The Romans <br> Make a Roman Villa out of recycling! <br> http://downloads.bbc.co.uk/history/handsonhist ory/romans villas.pdf |
| Optional Extras: |  |  |  |  |  |  |
| Handwriting practise |  Times table <br> practise | Spellings pr <br> Homophon blew, blue, Conjunction or | ctise <br> : night, knight, hole, hole : because, so, that, | Fresh air activity: <br> Make an outdoor bingo game. Plan a list of things you need to look for on your walk. Share this with a friend do they can play on their walk! | Pick a question from the talk tasks and have a good chat about it! | A family activity! Each person has a chance to take the lead. Everyone else has to mirror what they do - remember this means you will be using the opposite arm/leg etc! |

Add these amounts of money.

## Harvey says:

$$
£ 5+£ 2+£ 1=£
$$

$$
24 p+7 p=\ldots p
$$

$$
39 p+20 p=\ldots p
$$

$$
43 p+15 p=
$$

$\qquad$

$$
£ 3+37 p=£ \_ \text {and ___p }
$$

$$
£ \_+99 p=£ 5 \text { and } 99 p
$$

£10 +

$$
\ldots p=£ 10 \text { and } 55 p
$$



How many different combinations are there?
Which two items would cost $£ 70$ ?

Task 4

Dan has these coins and notes.


He makes an amount greater than £20 but less than £30

Draw the money he could have used. You can use each coin or note more than once.

How many different ways can you find?

Here is a shopping list.

| Item | Price |
| :---: | :---: |
| Rubber | $20 p$ |
| Ruler | $18 p$ |
| Pencil | $32 p$ |
| Crayon | $27 p$ |
| Pen | $45 p$ |
| Glue | $36 p$ |

- I spend exactly 50 p. Which two items did I buy?
- I bought two of the same item and it cost me 90 p. What was the item?
- Choose two items. How many different amounts can you make?
- What is the closest you can get to 65p.

Task 1
$3 p+7 p+4 p=14 p$
$£ 5+£ 2+£ 1=£ 8$
$24 p+7 p=31 p$
$39 p+20 p=59 p$
$43 p+15 p=58 p$
$£ 3+37 p=£ 3$ and $37 p$
$£ 5+99 p=£ 5$ and $99 p$
$£ 10+55 p=£ 10$ and $55 p$

Task 2
50p, 20p, 10p and $2 p$ are all even.
sp and Ip are odd.
Any silver coin added to Ip will give an odd answer except $1 p+5 p=6 p$ (even).
Any silver coin added to $2 p$ will give an even answer, except $2 p+5 p=7 p$ (odd).

So $5 p$ is the exception to the pattern made by the rest of the silver coins.

## Task 3

Children combine any two items (except for any combinations of crocodile, train and boat which would go over £100).
There are twelve possible combinations: car + monkey, car + crocodile, car + train, car + kite, car + boat, monkey + crocodile, monkey + train, monkey + kite, monkey + boat, crocodile + kite, train + kite and kite + boat.

Train and kite would cost $£ 70$.

## Task 4

Dan has these coins and notes.


He makes an amount greater than £20 but less than $£ 30$

Draw the money he could have used.
You can use each coin or note more than once.

How many different ways can you find?

Here is a shopping list.

| Item | Price |
| :---: | :---: |
| Rubber | $20 p$ |
| Ruler | $18 p$ |
| Pencil | $32 p$ |
| Crayon | $27 p$ |
| Pen | $45 p$ |
| Glue | $36 p$ |

- I spend exactly 50 p. Which two items did I buy?
- I bought two of the same item and it cost me 90p. What was the item?
- Choose two items. How many different amounts can you make?
- What is the closest you can get to 65p.

The ruler and the pencil as 18p and $32 p$ makes 50 p.

Two pens as 45p and 45p makes 90p.

Children to explore the totals that can be made by adding two items together.

The rubber and the pen would cost 65 p as 20p and $45 p$ make 65p.

Find the Difference Task 1

Choose a method to find the difference between these amounts.

| $£ 61$ |  |
| :--- | :--- |
| $£ 23$ |  |



Find the Difference Task 2
Fran and Ahmed are looking at how much money they have.

Ahmed says,
"I have $£ 2$ and 35 p."

Fran says,
"I have these coins.
The difference between our amounts is 48p."


Explain your answe

## Find the Difference Task 3

Use these coins and notes to make two amounts that have a difference of $£ 5$.


## Task 4



How many different answers can you find?

Jake has $2 p$.

Jenny has 10p.

Both of them have a $2 p$ coin.

What other coins could Jenny have?

## Task 1

$£ 61-£ 23=£ 38$
$59 p-54 p=5 p$
£11 - £9 = £2
$90 p-37 p=53 p$
Encourage children to talk about their methods and whether they counted on or back.

## Task 2

Fran has $£ 2$ and 74p.
Fran is wrong. The difference between their amounts is $39 p$.

## Task 3

Children find any combinations with a difference of $£ 5$. There are many possible answers including:
$£ 20$ and $£ 15$
$£ 10$ and £5
$£ 40$ and $£ 35$

## Task 4



## Find Change Task 1

Anna visits 4 shops. Work out how much change she got.


## Find Change Task 2

Jake bought an apple for 37 p.


He was given some change:


Jake thinks he's been given the wrong change. What do you think?

Explain your answer.

If Jake bought a banana for $42 p$ instead, how much change would he get? What coins could he be given?

## Find Change Task 3



Jasmine goes to the supermarket.
She has these coins:


Her items cost 78p.


Which coins will she use to pay?
How much change will she get?
What coins could she have in her change?
Find 5 different possibilities.

## Find Change Task 3

I have 20p.

My change is more than $5 p$ but less than 10p.

What could I have bought?


Sweet: 7p


Chocolate: $12 p$


Apples: 18p


Banana: $4 p$

I paid for my shopping with one coin.

Here is my change.


What could I have paid with and how much would the item have been?

Task 1:
$00 p-98 p=2 p$
$50 p-40 p=10 p$
$80 p-75 p=5 p$
$70 p-69 p=1 p$

Task 2:
100p-37p $=63 p$
Jake has been given the wrong change.
The shopkeeper has given him 10p too much because they have made a mistake in their calculating or got the number bonds to 100 wrong.
$100 p-42 p=58 p$ Children choose a combinations of coins that total $58 p$. For example: $50 p+5 p+2 p+1 p$

## Task 3:

she will need to use all her three coins to pay.
$90 p-78 p=12 p$
she will get $12 p$ change.
Children choose any combination of coins that total 12p. These could include:
$10 p+2 p$
$10 p+1 p+1 p$
$5 p+5 p+2 p$
$5 p+5 p+1 p+1 p$
$2 p+2 p+2 p+2 p+2 p+2 p$

| I have 20p. <br> My change is more than $5 p$ but less <br> than 10p. | Chocolate bar or a <br> sweet and banana. |
| :--- | :--- |
| What could I have bought? |  |

I paid for my shopping with one coin.

Here is my change.


What could I have paid with and how much would the item have been?

Rachel has these coins in her purse:


She wants to buy these two items:

She gives the shop keeper these coins.

The shop keeper says she hasn't given enough money.
Why?

Elena bought fruit juice and an apple. She paid with 90p. How much change did she get?
Ahmed bought an apple and a banana. He paid with a 50p coin. How much change did he get?

## Two-Step Problems Task 2



He paid with $£ 1$. How much change did he get?
$\qquad$ p- $\qquad$ $\mathrm{p}=$ $\qquad$ p

Samuel had saved up $£ 40$.
He bought a book and a jigsaw puzzle.


He got £24 change.
How much did the two items cost altogether?

Each item cost a whole number of pounds.
What could each item have cost?
Draw bar models to show four possible answers.


## Task 4

## Ghost Train: 90p

Emily finds a 20p coin.

She puts it with her other three 20p coins.

Does Emily have enough to ride the ghost train?

Explain why.

## Alex has 90 pence.

He bought a rubber for 30 pence and wants to buy a pencil.


Pencil: 70p

The shopkeeper will not sell him the pencil.
Explain why.

## Task 1

| John |
| :--- | :--- |
| $84 p$  <br> $19 p$ $65 p$ |

$100 p-84 p=16 p$
John gets 16p change

Elena
$58 p+27 p=85 p$
$90 p-85 p=5 p$
Elena gets 5 p change

Ahmed
$27 p+19 p=46 p$
$50 p-46 p=4 p$
Ahmed gets $4 p$ change

## Task 2

Rachel has chosen items costing $75 p$ in total. $40 p+35 p=75 p$
She has given $50 p+20 p=70 p$ which is $5 p$ too little.
She could have given 50p, 20p and 10p, totalling 80p.
$80 p-75 p=5 p$
She would have been given $5 p$ change.
This could have been in the following forms:
sp
$2 p, 2 p, 1 p$
$2 p, I p, I p, I p$
Ip, Ip, Ip, Ip, Ip
She will have 29p left

## Task 3

$£ 40-£ 24=£ 16$
The two items cost $£ 16$.
Accept any four correct combinations. Bar models should show approximately the correct proportions.

For example:

$$
£ 16
$$



Emily finds a 20p coin.
She puts it with her other three 20p coins.

Does Emily have enough to ride the ghost train?

Alex has 90 pence.
He bought a rubber for 30 pence and wants to buy a pencil.


> Pencil: 70p
$90 p-30 p=60 p$
$70 p>60 p$

He does not have enough money to buy the pencil.

The shopkeeper will not sell him the pencil.
Explain why.

No, because she only has 80p.

She would need 10p more.

$$
90 p>80 p
$$

English Activity 1: identifying syllables
When we say a word, the sounds we create naturally divide the word into parts. We call these parts "syllables." For example, the word "machine" has two parts: ma-chine. The word "important" has three parts: im-por-tant.
Clapping whilst saying words out loud can help you to count the number of syllables in a word.

Read these words and indicate whether the words have 1, 2 or 3 syllables.

| Word | One <br> Syllable | Two <br> Syllables | Three <br> Syllables |
| :--- | :---: | :---: | :---: |
| e.g. child/ren |  |  |  |
| Helpdesk |  |  |  |
| Seventh |  |  |  |
| Chimpanzee |  |  |  |
| Champion |  |  |  |
| Thundering |  |  |  |
| Ten |  |  |  |
| Monkey |  |  |  |
| December |  |  |  |
| Dinosaur |  |  |  |
| Tiger |  |  |  |
| Area |  |  |  |
| Laptop |  |  |  |
| Computer |  |  |  |
| Cookie |  |  |  |
| Umbrella |  |  |  |
| Bear |  |  |  |

## Answers:

Read these words and indicate whether the words have 1, 2 or 3 syllables.

| Word | One <br> Syllable | Two <br> Syllables | Three <br> Syllables |
| :--- | :---: | :---: | :---: |
| e.g. child/ren |  |  |  |
| Help/desk |  |  |  |
| Se/venth |  |  |  |
| Chim/pan/zee |  |  |  |
| Champ/i/on |  |  |  |
| Thun/der/ing |  |  |  |
| Ten |  |  |  |
| Mon/key |  |  |  |
| De/cem/ber |  |  |  |
| Di/no/saur |  |  |  |
| Ti/ger |  |  |  |
| a/re/a |  |  |  |
| Lap/top |  |  |  |
| Com/pu/ter |  |  |  |
| Coo/kie |  |  |  |
| Um/brell/a |  |  |  |
| Sand/wich |  |  |  |
| Bear |  |  |  |

## Haiku Rules Eath hatath ha ony the teme

Summer is over,
Days are getting shorter now, Soon it's time for school.

The lines follow a pattern of syllables:

5-7-5

Cars are so speedy,
Zipping by just like rockets.
When can I drive one?


Haiku poems are a traditional Japanese art form. Here's one...

> My two plum trees are So gracious. See, they flower. One now, one later.


## What is a Haiku?

## What did you notice about the poems?

Think about:

- the poem's theme;
- how many lines are in each poem;
- how many syllables in each line.

My two plum trees are
Three lines in each
poem

Winter is coming.
Snow will be arriving soon.
We should rake the leaves.

Final line is a comment or observation on the theme.
natural theme

5 syllables in first line 7 syllables in middle line 5 syllables in final line

## Let's have a go!

How can we write a haiku?

First, we need to choose a theme. It doesn't have to be about seasons or nature, but let's be traditional.

Then, we brainstorm some words or phrases associated with that theme...
Lhot sunshine flowers holiday
beach ice-cream games sea swimmimg fun warm sand

## Let's have a go!

 How can we write a haiku?Next, we choose two or three ideas which will flow together.

## Summene

Lot sunshine flowers holiday
begch ice-cream games sea
swimming fun warm sand

Now we have our ideas, let's try to fit them into the 5-7-5 syllable format.
You might have to alter words or phrases slightly fit the pattern.

Summer
Holidays are here
We can go to the beach sea side and
Hot sand the cool sea

Now we have our ideas, let's try to fit them into the 5-7-5 syllable format.
You might have to alter words or phrases slightly fit the pattern.

## Summer

Holidays are here.
We can go to the seaside.
Hot sand and cool sea.

## Let's have a go!

You could write a haiku about the seasons, or about an animal or plant.
The choice is yours!


## Plenary

What have we learned about Haiku?

- Each poem has only 3 lines.
- The syllable pattern of the poem should be 5-7-5.
- Haiku are often written about seasons and nature.



## Set A/B

Layla was in a grump. A stompy, clumpy grump.
Baby-Jo had been crying and wailing all morning. Dad had been trying everything but it hadn't worked. He had changed her, fed her, tickled her, rocked her and sung to her but she was still not happy.
"I think it might be her teeth," Dad explained.
"I've got teeth and I don’t grump," grumped Layla.
"We've got to go to the big shop. Maybe that will calm her down," said Dad. "If not, we can get her a cool chew toy. That might do the trick."


The walk to the big shop did not calm her down. Baby-Jo wiggled and wailed in her buggy all the way there. Layla wiggled and wailed on the inside. Why couldn't she have a cool toy too?

Her mood did not improve when they were inside the shop. Could she have a comic? No. Could they get some Choco-rice? No. Could they have spicy chips for tea? No - not healthy.


Then, Layla saw it. There, on the shelf, was a beautiful little notebook with sequins you could stroke up and down to change the picture. In fact, there were two - a purple one and a pale blue one. Layla loved them both. Dad was busy with Baby-Jo who was really screaming now. Quick as a flash, Layla grabbed the pale blue book and tucked it into the trolley between the bag of apples and a bottle of squash.

She was just in time. At that moment, Dad looked around and asked her to get a bag of nappies from the shelves on the other side.

When they went to pay, Layla quickly hid the pale blue notebook under some other cartons and then went to the other end to put their things into their bags. Then she gasped. Dad pulled out a purple, sparkly notebook and gave it

to the man to scan. "That's for being so good," he smiled.
"Thanks, Dad!" said Layla in a sad voice.
"I thought you'd be happy," said Dad.
"I am," said Layla and she flung her arms around him. Meanwhile, a little hand found the pale blue book and tucked it behind the boxes of chewing gum near the till.

Questions for The Notebook

## Vocabulary:

1. Layla was in a grump ... In this sentence, in a grump means ... Tick one.

| having a daydream | $\square$ | doing a dance | $\square$ |
| :--- | :--- | :--- | :--- |
| in a bad mood | $\square$ | in her bed | $\square$ |

2. "We've got to go to the big shop, Maybe that will calm her down. What does calm her down mean?
3. ... under some other cartons ... In this sentence, cartons means ... Tick one.

| bags | $\square$ | books | $\square$ |
| :--- | :--- | :--- | :--- |
| coins | $\square$ | boxes | $\square$ |

Identify key aspects
4. What did Dad say he might get for Baby-Jo at the big shop?
5. Name two things that Layla was not allowed to get in the big shop.
a. $\qquad$ b. $\qquad$
6. What colour was the notebook that Layla grabbed?

Inference
7. Layla wiggled and wailed on the inside ... What does this mean? Tick one.
She was cross but didn't show it. $\square$ She had a poorly tummy. $\square$ She was hungry. $\square$ She was tired of walking. $\square$
8. Why did Layla hide the notebook?

## Sequence

9. Number the sections from $\mathbf{1}$ to $\mathbf{4}$ to show the order in which they happen.

| Layla got a bag of nappies from the shelves. |  |
| :--- | :--- |
| Dad rocked Baby-Jo. |  |
| They went to pay. |  |
| They walked to the big shop. |  |

Predict
10. What do you think Layla will do next time she really wants something from the shop?

## Questions for The Notebook Set B

Vocabulary:

1. ... wailing all morning ... In this sentence, wailing means ... Tick one.
moaning

playing

fishing $\square$
feeding $\square$
2. ... "That might do the trick." ... In this sentence, do the trick means ... Tick one. make the baby laugh $\square$ make it right $\square$ make a magic spell $\square$ make the baby cold $\square$
3. Look at the paragraph beginning Her mood ... Find and copy a word that means get better.

## Identify key aspects

4. Name two things Dad did to try to cheer up Baby-Jo.
a. $\qquad$ b. $\qquad$
5. How did Dad take Baby-Jo to the shop?
6. What did Dad ask Layla to get from the shelves?

## Inference

7. "I think it might be her teeth," Dad explained ... what did he mean? Tick one.

Baby-Jo had bitten herself. $\square$ Baby-Jo's teeth were dirty.


Baby-Jo's teeth were hurting. $\square$ Baby-Jo couldn't eat. $\square$
8. Why did Layla gasp when Dad pulled out a purple notebook?

## Sequence

9. Number the parts of the story from 1 to 4 to show the order in which they happen.

| Layla hugs Dad. |  |
| :--- | :--- |
| Layla sees some beautiful notebooks. |  |
| Layla was in a bad mood. |  |
| Dad buys a purple notebook. |  |

## Predict

10. What do you think the man at the till will say when he finds the pale blue notebook by the chewing gum?

## Answers for The Notebook

## Set A:

## Vocabulary:

1. in a bad mood
2. make her stop crying/make her be quiet/make her relax
3. boxes

## Retrieval:

4. a cool chew toy
5. Accept any two from: comic/Choco-rice/spicy chips.
6. pale blue

## Inference:

7. She was cross but didn't show it.
8. She didn't want her dad to see that she had taken it (without him saying she could).

Sequence:
9.

| Layla got a bag of nappies from the shelves. | $\mathbf{3}$ |
| :--- | :--- |
| Dad rocked Baby-Jo. | $\mathbf{1}$ |
| They went to pay. | $\mathbf{4}$ |
| They walked to the big shop. | $\mathbf{2}$ |

## Predict:

10. Accept any answers that suggest she had learnt her lesson, e.g. ask nicely and not just take.

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## Answers for The Notebook

## Set B:

## Vocabulary:

1. moaning
2. make it right
3. improve

## Retrieval:

4. Accept any two from: changed her, fed her, tickled her, rocked her and sung to her. Also accept that he took her to the big shop.
5. in the buggy
6. (a bag of) nappies

## Inference:

7. Baby-Jo's teeth were hurting.
8. She gasped because she had already put the pale blue notebook in with the shopping.

Sequence:
9.

| Layla hugs Dad. | $\mathbf{4}$ |
| :--- | :---: |
| Layla sees some beautiful notebooks. | $\mathbf{2}$ |
| Layla was in a bad mood. | $\mathbf{1}$ |
| Dad buys a purple notebook. | $\mathbf{3}$ |

## Predict:

10. Accept answers that reflect that the book is in the wrong place, e.g. "What's that doing there?" or "How did that get there?" or "Perhaps they didn't want it after all."

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## Year 2

## Homophones 1

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## Homophones 1

Choose the correct homophone to complete each of the sentences below and write it on the line.

| The teacher could not $\qquad$ what the boy was saying because the children were making too much noise. | here hear |
| :---: | :---: |
| I wasn't sure whether the answer to the calculation was $\qquad$ or five. | two too to |
| All the children were $\qquad$ in the DT lesson because they were concentrating on their designs. | quiet quite |
| As he walked along the shore, he stared out at the $\qquad$ and wondered what creatures lurked in its depths. | see sea |
| All the countries on the map are labelled with $\qquad$ national flag beside them. | their they're there |
| The storm hammered wildly at the door and the wind howled as it $\qquad$ dust down the chimney and into the fireplace. | blew blue |

Insert the correct homophone into each of the sentences below. Use the picture as a clue.
Through the towering trees, the ___ is an omnivore
rode swiftly on his horse towards the distant castle.
The American black__
which eats plants and berries but also fish.

## Answers: Homophones 1

Included in each answer is a possible strategy that teachers could use to support pupils in remembering each homophone.

1. hear: you hear with your ear
2. two: link to twice and twins where you can hear the ' $w$ '
3. quiet: ends with a ' t ' like silent
4. sea: you see with two eyes
5. their: the Pr not the e
6. blew: the wind blew
7. knight: a knight protects the king; pronounce the word $k$-night
8. bear: bears have ears


## The Environment

We are going to be learning about the environment.


Do you know anything interesting about the environment?

When we talk about 'the environment', what do we mean?


## The Environment

Humans, like all living things, need certain things to live and be healthy. We need somewhere safe to live, clean air to breathe, clean water to drink, and good food to eat.

Humans, and all living things, get everything we need from our home, Planet Earth! This is our environment.

It is important that we keep the environment healthy by taking care of the soil, the water, the air and all the plants and animals that live here. That way the Earth can keep giving us all the things that we need to be happy and healthy.

Taking care of the Earth is also called caring for the environment, or 'being green'.

## The Environment

The weather, or climate, is a very important part of what makes Planet Earth a pleasant environment for humans, other animals and plants.

## The Environment



But the weather is starting to change because humans are doing things that are causing damage to the environment.

## The Environment



The sun keeps us warm. It gives us energy so that plants can grow. These plants give animals their energy when they eat them. The rain brings water for animals to drink and plants to absorb through their roots.

## The Environment

The weather needs to be just right to keep the living things on Planet Earth happy and healthy.


## Greenhouse Gas

Planet Earth is surrounded by a layer of air. We call it the sky. Scientists call it the atmosphere.

Outside our atmosphere is a layer of gas that surrounds the Earth.

The gases let the sunlight through to warm us up.

The gases keep some of the heat in our atmosphere, making the earth nice and warm. They let some of the heat back out into space.


It's like the Earth was wearing the perfect blanket. Not too hot, not too cold. Just right!

## Greenhouse Gas

Recently, the layer of gases has been getting thicker, like the Earth is wearing a thicker blanket!

Less of the heat can escape out into space and more heat is staying in the atmosphere warming us up.


## Planet Earth is getting hotter!

## Greenhouse Gas

Have you ever been in a greenhouse?

We call the gases around the Earth greenhouse gases, because they behave like the glass in a greenhouse. They let the sunlight in but stop the heat from escaping, trapping it inside.


## Because of this, Planet Earth is warming up.

## Comparative Test

We are going to do a test that shows the effects of greenhouse gases.

What you need:


## Comparative Test



## What you do:

Create two mini environments by placing a building brick building in a tray with a block of ice.

Cover one of the mini environments with a layer of cling film. This cling film will act like the extra layer of greenhouse gases that are building up around the Earth's atmosphere.

We are going to leave the trays in a sunny place and start the stopwatches.
Watch the trays carefully and time how long it takes for the ice to melt in each mini environment.

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## Comparative Test



Prediction:

What do you think will happen?


The ice in the covered environment will melt faster.

The ice in the uncovered environment will melt faster.

The ice in both of the environments will melt faster.

## Comparative Test

What happened to the ice in our mini environments?

Look carefully at your measurements.

Which ice melted fastest?

Why did this happen?

Write a sentence to explain what you have found out.

## Climate Change

The Effects of Climate Change: Global Warming

Because the layer of greenhouse gas that surrounds the Earth is getting thicker, the temperature in our environment is rising too. Sometimes this is called global warming.

In many places, the weather is becoming hotter and dryer and there is less rain. There isn't always enough water to go around and some people do not have enough to drink.


In some places, plants will not grow properly because there is not enough rain. This means that there isn't enough food to eat and that some people are going hungry. We call periods when there isn't enough rain a drought. Droughts are becoming more common in many places in the world.

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## Climate Change

The Effects of Climate Change: Floods and Storms

In some places, the changing weather has led to floods, hurricanes and powerful storms.


Floods and storms are very dangerous and ruin the homes of people and animals.

## Climate Change

The Effects of Climate Change: Rising Sea Levels

As the sea ice melts, it turns into sea water. This means there is more water in the sea and the sea level is rising. As this happens, some cities that have been built on the coast may be flooded and the people who live there will have to find new places to live.


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## Climate Change

The Causes of Climate Change: Fossil Fuels
Things that humans are doing to the planet are making more greenhouses gases.
Burning fossil fuels like oil and coal adds greenhouse gases to the atmosphere.
We burn fossil fuels to make our gas and electricity and to power our cars, trains and aeroplanes.


Factories burn lots of fossil fuels when they make new things for us to buy.

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## What Can We Do?

Luckily, there are lots of things that all of us can do to protect our environment from climate change.

In the coming weeks we are going to be finding out lots of ways that we can help the environment and stop climate change from having such a bad effect on Planet Earth. If we all help, we can make a big difference!

Do you have any ideas?


You will need:

| - a piece of white | • green paint |
| :--- | :--- |
| card (A4 or A3) | - brown paint |
| - a fork | - a paint brush |
| - yellow paint | - water pot |
|  | - a tooth brush |



Get a piece of card and place it in front of you in portrait.


Carefully paint the underneath of a fork with yellow paint using a brush.


Pressing down with the fork, repeat creating a circular pattern leaving a space in the middle. You may need to apply more paint to your fork and go over the circle.


Wash your brush in the water pot and dip it on to the green paint. Paint a stem from the flower head down to the bottom of the page. Paint a leaf on to each side too.


Wash your brush using the water pot and dip it into brown paint. Apply the brown paint to the tooth brush.


Carefully print in the circle inside the yellow fork printing using the toothbrush. You may need to keep applying brown paint to the toothbrush.

## Top Tip:

You could choose to create a different flower using the same printing method. You could try daffodils or tulips.

## Talk Task:




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