YEAR 5

LEARNING

- FROM -

HOME

teachstarter

ABOUT THIS PACK

This teaching resource pack has been handpicked by the Teach Starter team to include a range of resources that can be completed at home by children with the assistance of their parents or guardians.

The pack includes resources covering the key learning areas of English, Maths and Science, along with some additional craft and mindfulness activities - all for free!

In the rare event of a school closure or if a student needs to work remotely, this pack can be sent home with students or passed on directly to parents and guardians digitally to allow for students to complete the work with minimal preparation and supervision.

The pack is designed to allow for non-teachers to understand and implement the activities in a home environment without requiring additional resources found in a classroom. The pack can be completed digitally on a tablet/iPad or with pen and paper when printed.

For Teachers

Can I share this pack with parents, students and other teachers?

Of course! This pack has been created specifically for this purpose. Please feel free to share this pack digitally with your students, their parents or guardians, or other teachers.

You can share by copying the URL in the address bar of your browser, or simply clicking on the envelope icon above to send to an email address. You can also download the pack, and email the PDF document itself.

Please feel free to bundle this pack with your own home learning activities to extend or reinforce particular concepts for your students. You may also like to add specific activities such as reading, outdoor play, fine motor skills etc.

For Parents

How can I teach my child if their school closes?

By downloading this free resource pack, you will be equipped with a wide range of activities to share with your child while their school is closed.

We have ensured that this pack can be delivered by non-teachers by providing a helpful table of contents and activity overviews. All activities are age-appropriate and most will relate to work that your child has experienced in the classroom.

The activities can be completed in any order and have been selected to allow parents and guardians to easily implement them.

YEAR 5

CONTENTS

English

Editing

2 x Editing Worksheets - The Solar System and Music Players and Your Hearing
Students are required to edit the pieces of text using the provided editing symbols and then re-write the text correctly. There are 20 errors in each piece of text.

Reading

10 x Comprehension Worksheets
A comprehensive set of worksheets that cover a variety of comprehension skills. Students are required to read the text and answer the questions either in a workbook or using the sheet provided. There is a Crazy Creative Challenge for each comprehension skill that can be completed also.

Book Review
Students can pick a recent text they have read and then complete this Book Review template.

Grammar

Verb Past Tense Worksheet
Students are required to add the simple past tense verbs to complete the sentences.

Grammar Word Search
Students are required to find the grammatical terms listed in the Word Search. Spaces in the terms with two words are not present in the Word Search. Possessive Pronoun = POSSESSIVEPRONOUN in the Word Search.

Spelling

Word Work Grid - V1
Students use this grid of 15 activities when working with their spelling words. The activities can be completed using the provided templates or in a workbook.

Word Work Grid - V2
A second version has been provided to work with a new set of spelling words.

Persuasive Writing

Persuasive Writing Stimulus - All Families Should Own a Pet
Students are required to use the stimulus, which includes for and against arguments, to construct a persuasive text. A planning template and scaffolding sheet have also been provided to plan their ideas before they begin writing the persuasive text.

Narrative Writing

Narrative Writing Stimulus - The rain was pouring down...
Students are required to use the stimulus piece provided to write a narrative text. A narrative planning template has been provided to use before they begin writing.

Maths

Operations

1 to 12 x Colour Fun!
Students are required to find the answer to each multiplication sum and then colour that section the corresponding colour represented in the table provided.

Maths Word Problem Cards - Multiplication and Division
Students can complete these word problem cards in their workbook.

Maths Activities

Fractions - Renovate with a Rug!
In this investigation, students must use their knowledge and understanding of fractions to design a colourful floor rug for a home renovation competition. The floor rug design must adhere to a list of competition rules. Students must record and analyse their colour choices on the worksheet provided.

Pandora's Party Palace Maths Activity
Students use these sixteen problem-solving task cards in association with the stimulus to work with money in a real-world context.

Science

What are Adaptations?
Students read the What are Adaptations? text and then answer the questions on the sheet provided or in their book.

Earthly Word Search
A word search that uses vocabulary related to the Solar System.

Other

Mindfulness

Mindfulness Colouring Sheet - Cockatoo
Students use this sheet when they require a brain break or at the end of the day.

Moving Lines - Art Activity
Students use this activity to explore the use of line to create movement.

Music Players and Your Hearing - Editing

Add editing marks to text. There are 20 errors.

Do you now how much time you spend listening 2 music on your music device? Do you turn it up so loud that you cant here any outside noise. Well you may be doing more harm than good! Music players are a great source of entertainment, but they are also the cause of serius Hearing problems for young people today research has fund that young ppl are more likly to play their music too loud, which can result in hearing loss later in life.

The ear piece are designed to fit firmly in the listeners ear canal, alowing outside noise to be eliminated? This means that the music is Pumped directly into the the ear, potentially causing permanent dammage.

Editing Marks:	
Capital letter	≡
End punctuation	⊙ ! ?
Insert a word	⋏
Change to lower case	/ l.c.
Take something out	⸮
Check spelling	SP ◯
New paragraph	¶

Re-write the text correctly:

_____

_____

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The Solar System - Editing

Add editing marks to text. There are 20 errors.

The soler system is made up of eight planet's which orbit around the Sun

The four smaller planets closest to the Sun are mercury, Venus earth and Mars. They made up of rock and metel. the four outer planets are much larger. The too largest are Jupiter and Saturn, composd mainly of hydrogen and helium. The outermost Planets are Uranus and "Neptune". They are composed largely of ices, including frozen water ammonia and methane

our solar system is located within one of outer arms of the milky way galaxy, witch contains about 200 billion stars.

Editing Marks:	
Capital letter	≡
End punctuation	⊙ ❗ ❓
Insert a word	⅄
Change to lower case	/ l.c.
Take something out	⁊
Check spelling	SP ⬯
New paragraph	¶

Re-write the text correctly:

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The Thirsty Monkey

One summer's day, a very thirsty monkey was wandering around looking for some water. Hours passed and the monkey still could not find any water. The monkey was becoming more and more tired and started to feel very weak.

The thirsty monkey was almost ready to give up hope, when suddenly he found a jug with some water in it!

The monkey tried to pick up the jug, but it was too big and heavy. Disappointed, the monkey then tried to put his hand inside the jug to scoop out the water, but the opening was too small! He tried to push the jug over, but it would not budge. The monkey was sad, but he was not going to give up.

After thinking long and hard, the monkey thought of a great idea. He started to pick up some rocks that were lying on the ground and begun dropping them into the jug, one by one. As he put more rocks into the jug, the water rose. Eventually, the water was high enough for the monkey to have a drink. The monkey was happy that his idea had worked and he was no longer thirsty!

Moral: If you try hard enough, you may soon find the answer to your problem.

The Thirsty Monkey

1. Explain in your own words the moral of this story.

2. The author uses the words *thirsty, disappointed, sad* and *happy* in the passage.

   Why do you think he/she uses these words?

3. Why do you think it was important for the author to inform the reader that the monkey was feeling very weak?

4. What could have happened to the author to make them decide to write this passage?

CRAZY CREATIVE CHALLENGE

With a partner or on your own, create a comic strip story that relates to the text.

- ◉ How many scenes (boxes) will you need?
- ◉ Will you use speech or thinking bubbles?
- ◉ What pictures will you draw?

Name _____   **Date** _____

The Thirsty Monkey

1. Explain in your own words the moral of this story

_____

_____

_____

_____

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2. The author uses the words *thirsty, disappointed, sad* and *happy* in the passage*.*
Why do you think he/she uses these words?

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3. Why do you think it is important for the author to inform the reader that the monkey was feeling very weak?

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4. What could have happened to the author to make them decide to write this passage?

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Let's Go for a Swim!

One hot day, the Jones family decided to go for a swim to cool down. Dad and Mitch wanted to go to the beach, but Gran and Sarah wanted to go to the pool.

Dad and Mitch argued that the beach was better. "You can lay on the sand and build sandcastles at the beach," they said. "You can also body surf in the waves and eat fish and chips."

Gran and Sarah argued that the pool was better. "You don't get sand in your swimsuit in the pool," they explained. "You also don't get knocked over in the surf by big waves and there are no jellyfish that might sting you."

In the end, the family remembered that there was a swimming pool at the beach. When they got there, Dad and Mitch went swimming in the surf, whilst Gran and Sarah dangled their legs in the pool. Everyone was happy and cool.

On their way home, they stopped in at a fish and chip shop for a delicious dinner.

Let's Go for a Swim!

1. Why do Dad and Mitch like the beach more than the pool?

2. Why do Gran and Sarah like the pool more than the beach?

3. What are two positive comments that you could say about the beach that you could also say about the pool?

4. Which would you prefer, the beach or the pool?
   Explain why.

CRAZY CREATIVE CHALLENGE

It is important to be safe around water when you are at the beach or in a pool.

Design and make a poster to remind people of water safety.

Name _____   **Date** _____

Let's Go for a Swim!

1. Why do Dad and Mitch like the beach more than the pool?

_____

_____

_____

_____

2. Why do Gran and Sarah like the pool more than the beach?

_____

_____

_____

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3. What are two positive comments that you could say about the beach that you could also say about the pool?

_____

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4. Which would you prefer, the beach or the pool?
Explain why.

_____

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One Summer's Day

Ella and Kristen are sitting under a tree having a conversation.

Ella: Wow, it's hot today isn't it?

Kristen:

Ella: That sounds like a nice way to cool off. Where are you going to go?

Kristen:

Ella: I'd love to, but I didn't bring my swimmers. Thank you, though. You're so lucky to have a pool. Do you use it often?

Kristen:

Ella: I would use it all the time too, if I had a pool.

Kristen:

Ella: Thank you, I would love to come for a swim tomorrow.

One Summer's Day

1. Use Ella's questions and responses to help you infer what Kristen was saying.

   Write her dialogue in the blank spaces on the worksheet.

2. Does Kristen have a pool at home? How do you know?

3. How often does Kristen use the pool? How do you know?

4. When did Kristen ask Ella to go for a swim?

CRAZY CREATIVE CHALLENGE

Write one side of a conversation about something you did on the weekend.

⊙ Swap your conversation with a partner and see if they can fill in the missing dialogue using inferences.

Name _____   **Date** _____

One Summer's Day

1. Use Ella's questions and responses to help you infer what Kristen was saying.
   Write her dialogue in the blank spaces.

   Ella: Wow, it's hot today isn't it? _____

   Kristen: _____

   Ella: That sounds like a nice way to cool off. Where are you going to go?

   Kristen: _____

   Ella: I'd love to, but I didn't bring my swimmers. Thank you though. You're so lucky to have a pool. Do you use it often?

   Kristen: _____

   Ella: I would use it all the time too if I had a pool.

   Kristen: _____

   Ella: Thank you, I would love to come for a swim tomorrow.

2. Does Kristen have a pool at home? How do you know?

   _____

   _____

   _____

3. How often does Kristen use the pool? How do you know?

   _____

   _____

   _____

4. When did Kristen ask Ella to go for a swim?
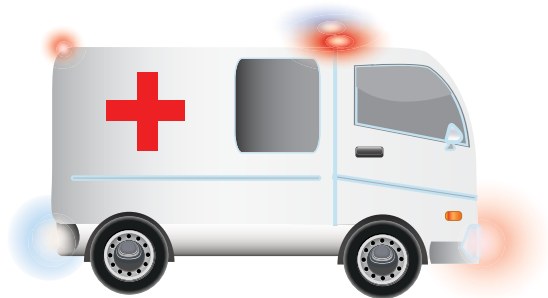
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Polly the Paramedic

Polly the Paramedic was just about to sit down for an afternoon rest. All of a sudden, the red phone started to ring with another emergency call. Daisy, a local dog, had called the emergency hotline because her owner had fallen off a ladder. Polly the Paramedic said, "Don't worry Daisy, I'll be there as quick as a flash!"

Polly the Paramedic climbed into the ambulance and turned the sirens on. As fast as she could, she drove the ambulance over to the house where Daisy the Dog and her owner were waiting.

Daisy's owner, Jerry, was still conscious, but he had broken his leg in the fall. Polly the Paramedic took Jerry to the hospital to get his leg put in a cast. After Jerry was feeling better, Polly took him back to his house. Daisy was happily waiting with a wagging tail.

Polly the Paramedic finally went home and enjoyed a nice, warm cup of tea.

Polly the Paramedic

1. Which of these statements **could not** really happen?

   a) a dog using the telephone

   b) a dog being worried about their owner

   c) a dog wagging its tail because it is happy

2. Which of these statements **could not** really happen?

   a) a paramedic having a cup of tea

   b) a paramedic talking to a dog on the telephone

   c) a paramedic driving to the hospital

3. Which of these statements **could** really happen?

   a) an owner telling their dog to call for a paramedic

   b) somebody falling off a ladder and breaking their leg

   c) a pet dog driving their owner to the hospital

4. Is this story real or make-believe?

   List two pieces of evidence to support your answer.

CRAZY CREATIVE CHALLENGE

Design and make a poster informing people what they should do in an emergency.

⏵ What will be the important points to include on your poster?

Name _____   **Date** _____

Polly the Paramedic

1. Which of these statements **could not** really happen?

    a) a dog using the telephone

    b) a dog being worried about their owner

    c) a dog wagging its tail because it is happy

2. Which of these statements **could not** really happen?

    a) a paramedic having a cup of tea

    b) a paramedic talking to a dog on the telephone

    c) a paramedic driving to the hospital

3. Which of these statements **could** really happen?

    a) an owner telling their dog to call for a paramedic

    b) somebody falling off a ladder and breaking their leg

    c) a pet dog driving their owner to the hospital

4. Is this story real or make-believe?

List two pieces of evidence to support your answer.

_____

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Bruno's Big Adventure

It was just an ordinary Thursday. All of the Williams family had gone to school or to work. Bruno the dog was once again left on the back porch to watch the clouds pass by.

As Bruno lay looking up at the clouds, a big gust of wind blew over. Bruno went into the yard to investigate. To his amazement, the side gate had flung open!

"I know I'm not meant to go out there," Bruno thought to himself. "But if I just have a little wander and not go too far from the house, I can be back before anyone knows that I'm gone!"

Bruno remembered his way to the park. When he got there, another dog was rolling around in the leaves. "That looks like fun!" Bruno thought to himself, so he joined in with the other dog.

Bruno was having so much fun in the park with his new friend that he had forgotten to go back home. It wasn't until he saw his owner in the park, holding his lead, that he knew he was in trouble!

Bruno's Big Adventure

1. All of the Williams family had gone out, so

    a) Bruno was left on the back porch.

    b) Bruno opened the gate.

    c) Bruno went to sleep.

2. What caused the gate to open?

3. The gate was open, so

    a) Bruno watched the clouds.

    b) Bruno closed the gate.

    c) Bruno went to the park.

4. Why was did Bruno's owner go to the park?

CRAZY CREATIVE CHALLENGE

Use a comic strip to write the end of Bruno's Big Adventure.

ⓘ What will happen to Bruno?

ⓘ How many boxes will you use?

Name _____   **Date** _____

Bruno's Big Adventure

1. All of the Williams family had gone out, so
    a) Bruno was left on the back porch.
    b) Bruno opened the gate.
    c) Bruno went to sleep.

2. What caused the gate to open?

_____

_____

_____

_____

3. The gate was open, so
    a) Bruno watched the clouds.
    b) Bruno closed the gate.
    c) Bruno went to the park.

4. Why did Bruno's owner go to the park?

_____

_____

_____

_____

COMPREHENSION

Sushi Rolls

Ingredients:

1 ½ cups of sushi rice

4 sushi sheets

1 cucumber, cut into thin strips

1 thinly sliced avocado

1 grated carrot

2 tablespoons of mayonnaise

Method

1. Rinse and drain rice 3 times or until water runs clear.

2. Place rice and 1½ cups of cold water in a saucepan over a medium heat. Cover.

3. Bring to the boil. Simmer for 12 minutes or until rice is soft.

4. Place 1 sushi sheet, shiny side down, on a sushi mat. Using damp fingers, spread ¾ cup of rice over the sushi sheet, leaving a 2 cm strip at one end.

5. Spread 1 teaspoon of mayonnaise over the rice. Arrange some cucumber, avocado and carrot over the mayonnaise.

6. Using the sushi mat, roll up firmly to form a roll. Cut into 6 slices. Repeat with remaining ingredients.

Sushi Rolls

1. Which one of these things do you need to do before putting the rice on the sushi sheet?

    a) spread mayonnaise over the rice

    b) boil the rice

    c) roll up the rice

2. Number the following sentences in the correct order for making sushi rolls.

    _____ Boil the rice.

    _____ Spread mayonnaise over the rice.

    _____ Prepare the ingredients.

    _____ Put on cucumber, avocado and carrots.

    _____ Spread the rice over the sushi sheet.

3. What is the final step when making sushi rolls?

4. Draw five pictures to illustrate how to make sushi rolls.

CRAZY CREATIVE CHALLENGE

Write your own recipe with pictures showing how to make a food or drink you enjoy.

Name _____   **Date** _____

Sushi Rolls

1. Which one of these things do you need to do before putting the rice on the sushi sheet?

    a) spread mayonnaise over the rice

    b) boil the rice

    c) roll up the rice

2. Number the following sentences in the correct order for making sushi rolls.

    _____ Boil the rice.

    _____ Spread mayonnaise over the rice.

    _____ Prepare the ingredients.

    _____ Put on cucumber, avocado and carrots.

    _____ Spread the rice over the sushi sheet.

3. What is the final step when making sushi rolls?

_____

_____

_____

_____

_____

4. Draw five pictures to illustrate how to make sushi rolls.

Advertising Facts and Opinions

Ellie's Great Adventure is the best book you will ever read!
Available now from *www.booksgalore.com*

Come and try a pair of our new school shoes made with natural rubber soles. You will feel like you are walking on a cloud.
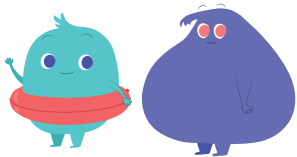
Watch The Grocks on Channel 2, every afternoon at 4 pm. We think it is the funniest show on television.

Drink more water! Water is healthier than soda and it tastes better too.

Advertising Facts and Opinions

1. Write the fact and opinion in the advertisement for Ellie's Great Adventure.

2. *You will feel like you are walking on a cloud.*

   This is the opinion in the advertisement for school shoes.

   Explain why this is the opinion.

3. Write the fact and opinion in the advertisement for The Grocks.

4. Write another fact you know and another opinion you have about water.

CRAZY CREATIVE CHALLENGE

Write a letter to a friend about your day at school.

Remember to include both facts and opinions about your day.

Name _____   **Date** _____

Advertising Facts and Opinions

1. Write the fact and opinion in the advertisement for *Ellie's Great Adventure*.

Fact: _____

Opinion: _____

2. *You will feel like you are walking on a cloud.*
This is the opinion in the advertisement for school shoes. Explain why this is the opinion.

_____

_____

_____

_____

3. Write the fact and opinion in the advertisement for The Grocks.

Fact: _____

Opinion: _____

4. Write another fact you know and another opinion you have about water.

Fact: _____

_____

Opinion: _____

_____

Sharks – The Leaders of the Ocean

There are around 400 different types of sharks in the world. Sharks are the top predators of the ocean's natural food chain.

Sharks have incredibly sharp teeth and they never run out of them. If a shark loses a tooth, another moves forward from within the shark's jaw (where it neatly keeps a supply of replacement teeth). This way, it is almost impossible for a shark to end up without a full set of teeth. A shark may grow and use over 20 000 teeth in its lifetime.

Sharks have super senses. Two-thirds of a shark's brain is dedicated to its most powerful sense – smell. They have a mirror-like layer on their eyes, allowing them to see better in the water. Sharks are also able to feel vibrations in the water, using a line of canals that go from its head to its tail. These canals are filled with water and contain sensory cells with hairs growing out of them.

On average, a shark's lifespan is 20-30 years in the wild.
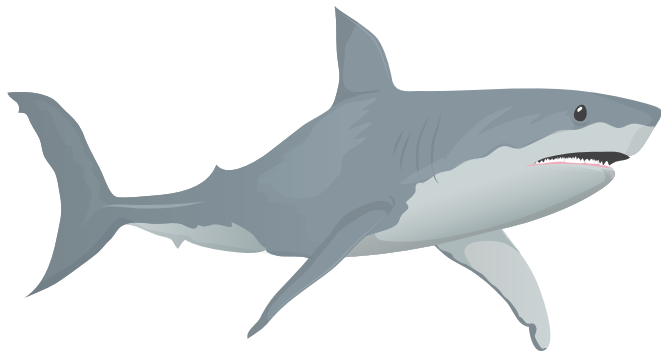
Sharks – The Leaders of the Ocean

1. What is the main idea of this text?

2. What are three details that support the main idea?

3. Carefully read the text.

   Underline any words which are repeated, or seem important. Write them down.

4. Another good title for this text could be

   a) Small Sharks.

   b) I Love Sharks.

   c) Facts about Sharks.

   d) My Pet Shark.

CRAZY CREATIVE CHALLENGE

Draw and label a picture of a shark in its habitat.

Name _____   **Date** _____

Sharks – The Leaders of the Ocean

1. What is the main idea of this text?

_____

_____

_____

_____

2. What are three details that support the main idea?

Detail 1: _____

_____

Detail 2: _____

_____

Detail 3: _____

_____

3. Carefully read the text.
Underline any words which are repeated, or seem important. Write them down.

_____

_____

_____

_____

4. Another good title for this text could be

   a) Small Sharks.

   b) I Love Sharks.

   c) Facts about Sharks.

   d) My Pet Shark.

Going on Holidays

The day had finally arrived... school had ended and the holidays had begun!

I was filled with great excitement. Tomorrow my family and I were heading off on our annual holiday.

I took out my big green and blue suitcase from the bottom of my wardrobe, threw it onto my bed and quickly unzipped it. An old musty smell burst out of the bag, so I drowned it with some of my mother's best perfume.

Inside were the remains of who knows what from the bottom of my old boots and an old lift pass. After making my suitcase nice and clean again, I started gathering all the things I would need for my holiday.

I slowly loaded my suitcase with warm clothes. I packed my beanie and gloves, along with the long stripy scarf Nan knitted me. I couldn't wait to try the sleek new goggles my friend Sam leant me, I hoped that they would make me go faster!

Lastly, I packed some pocket money so I could buy a delicious hot chocolate at the end of my fun days.
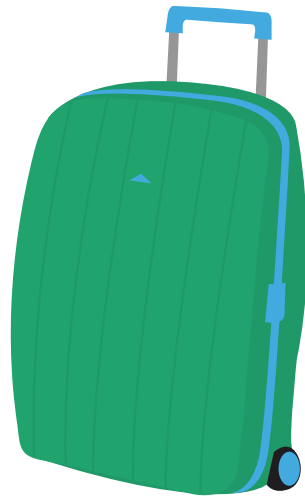
Going on Holidays

1. Predict where the person might be going on holidays.

Why do you think this?

2. Who might the main character be?

Why do you think this?

3. *An old musty smell burst out of the bag.*

Predict what caused the smell. Why do you think this?

4. Do you think the main character will go on the same holiday again next year?

Explain a reason for your prediction.

CRAZY CREATIVE CHALLENGE

You are stranded on a deserted Island.

Write and/or draw a list of ten items that you wish you had packed and taken with you.

Name _____   **Date** _____

Going on Holidays

1. Predict where the person might be going on holidays.
Why do you think this?

_____

_____

_____

_____

2. Who might the main character be?
Why do you think this?

_____

_____

_____

_____

3. *An old musty smell burst out of the bag.*
Predict what caused the smell. Why do you think this?

_____

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4. Do you think the main character will go on the same holiday again next year?
Explain a reason for your prediction.

_____

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How Planes Fly
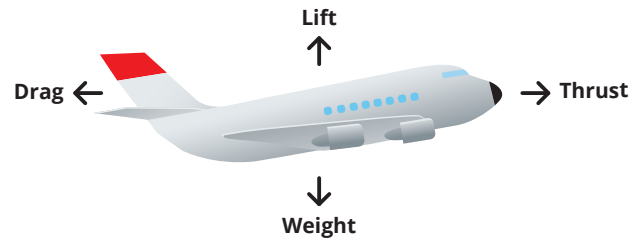
Four forces; thrust, lift, drag and weight are needed to make a plane fly.

Lift – pushes the plane upwards. It mainly comes from the air moving around the plane's specially shaped wings.

Thrust – moves the plane forward and is produced by the engines.

Weight – is the pull of gravity on the plane towards the Earth.

Drag – is the resistance of the air that slows the plane down.

When the plane's engines produce a force of **thrust** that is greater than the force of **drag**, the plane will move forward.

When the forward motion of the plane is enough to produce a force of **lift**, that is **greater** than the weight, the plane will move upwards.

When all four forces work together, a plane will fly.

How Planes Fly

1. What are the four forces a plane needs to fly?

2. What produces the thrust of a plane?

3. What helps give the plane more lift?

   Underline any words which are repeated, or seem important. Write them down.

4. Explain the following terms:
   a) lift
   b) thrust
   c) weight
   d) drag

CRAZY CREATIVE CHALLENGE

Use some scrap paper to design and make a paper plane.

Have a competition with a friend to see whose plane can fly the furthest.

After a few turns, modify your paper plane so that it has more lift.

Name _____   **Date** _____

How Planes Fly

1. What are the four forces a plane needs to fly?

_____

_____

_____

_____

2. What produces the thrust of a plane?

_____

_____

_____

_____

3. What helps give the plane more lift?
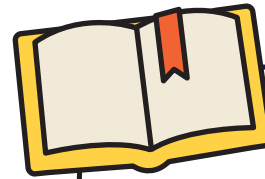
_____

_____

_____

_____

4. Explain the following terms:

Lift _____

Thrust _____

Weight _____

Drag _____

BOOK REVIEW

TITLE: _____

AUTHOR: _____

GENRE: _____

TIME ERA: _____

LOCATION: _____

MAIN CHARACTERS: _____

_____

Favourite Character:

Gender:

_____

Age:

_____

Close Relationships:

_____

_____

Explain why this character is your favourite:

_____

_____

_____

Book summary:

_____

_____

_____

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_____

_____

_____

_____

_____

Favourite part:

_____

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Verb Past Tense Worksheet   Name: _____

1.   Yesterday we _____ (look) for bugs in the park.

2.   We _____ (search) for bugs under rocks and on leaves.

3.   I _____ (see) a butterfly. It _____ (fly) past the purple flowers.

4.   I _____ (lift) up a big rock and _____ (find) a lady beetle.

5.   I _____ (place) it in my bug jar, so that I could show my parents

     when I _____ (get) home.

6.   I _____ (catch) three bugs at the park. I _____ (find) a

     ladybug, a rhino beetle and a tiny bug that I didn't know.

7.   I _____ (think) my brother Sam could help me identify the

     tiny bug.

8.   We _____ (get) out the bug book, and Sam _____ (open)

     my bug jar to get a closer look. The bug _____ (crawl)

     up Sam's sleeve.

9.   It _____ (give) him a fright, and he

     _____ (spit) out the water he was

     _____(drink).

10. We _____ (laugh)

     until we _____ (fall) down.

Grammar Word Search

G	P	A	C	N	E	Y	X	E	B	P	X	R	I	B	B	A	B
P	U	D	O	O	Q	V	N	P	R	R	O	U	N	C	D	Y	R
O	O	V	M	H	M	J	I	O	R	H	E	U	X	J	I	H	E
S	R	E	M	N	L	P	P	T	P	O	O	V	E	S	Z	M	V
S	G	R	O	Q	U	E	O	A	C	N	N	C	C	D	A	B	R
E	N	B	N	Z	R	O	T	U	E	E	T	O	J	E	K	N	A
S	U	Z	N	N	S	E	N	V	N	I	J	D	U	U	A	E	L
S	O	W	O	E	M	J	I	E	V	D	A	D	E	N	J	X	U
I	N	U	U	F	J	S	O	A	V	F	V	W	A	X	T	K	G
V	N	L	N	U	E	S	L	I	E	I	V	E	D	F	A	A	E
E	H	R	S	S	I	C	C	S	Y	Z	T	S	R	N	Q	W	R
P	R	Z	S	M	L	N	U	O	N	I	N	C	M	B	M	Q	R
R	T	O	I	A	N	T	O	N	Y	M	W	K	E	R	F	U	I
O	P	L	U	B	R	E	V	E	L	P	M	I	S	L	X	V	G
N	E	S	N	U	O	N	R	P	E	V	I	T	A	L	E	R
O	E	A	B	S	T	R	A	C	T	N	O	U	N	I	J	O	G
U	S	E	S	X	Y	B	L	T	L	R	I	E	J	T	Z	S	C
N	I	J	C	A	R	L	M	C	X	T	V	P	E	W	E	T	G

* ABSTRACT NOUN
* ADVERB
* COMMON NOUNS
* METAPHOR
* POSSESIVE NOUN
* PROPER NOUN
* SIMPLE VERB
* ADJECTIVAL CLAUSE
* ANTONYM
* COMPOUND VERB

* NOUN
* POSSESSIVE PRONOUN
* RELATIVE PRONOUN
* VERB
* ADJECTIVE
* COLLECTIVE NOUN
* IRREGULAR VERB
* NOUN GROUP
* PRONOUN
* SIMILE

Word Work Grid

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

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

Rhyming Wheels

Write as many words as you can that rhyme with the sound in the rhyming wheel. Use the alphabet at the bottom to help you think of more words.
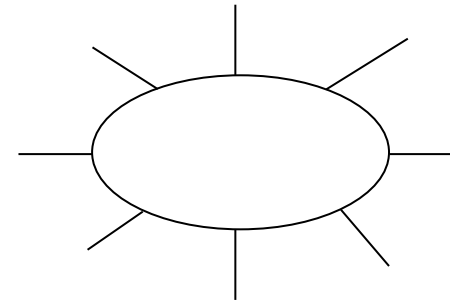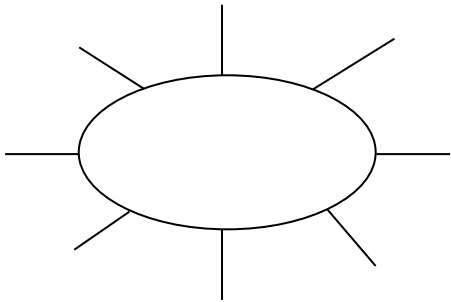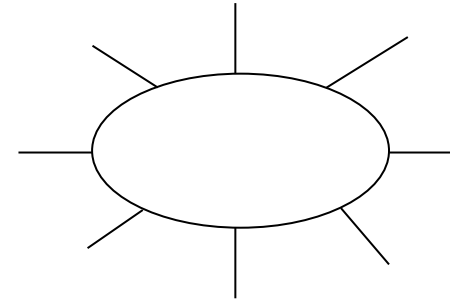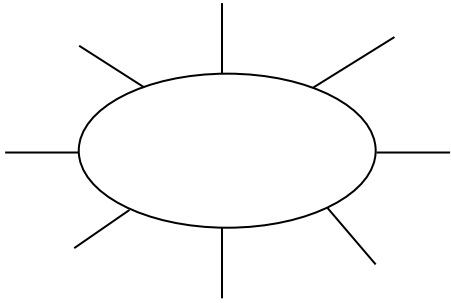
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

_____ ,

_____

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_____
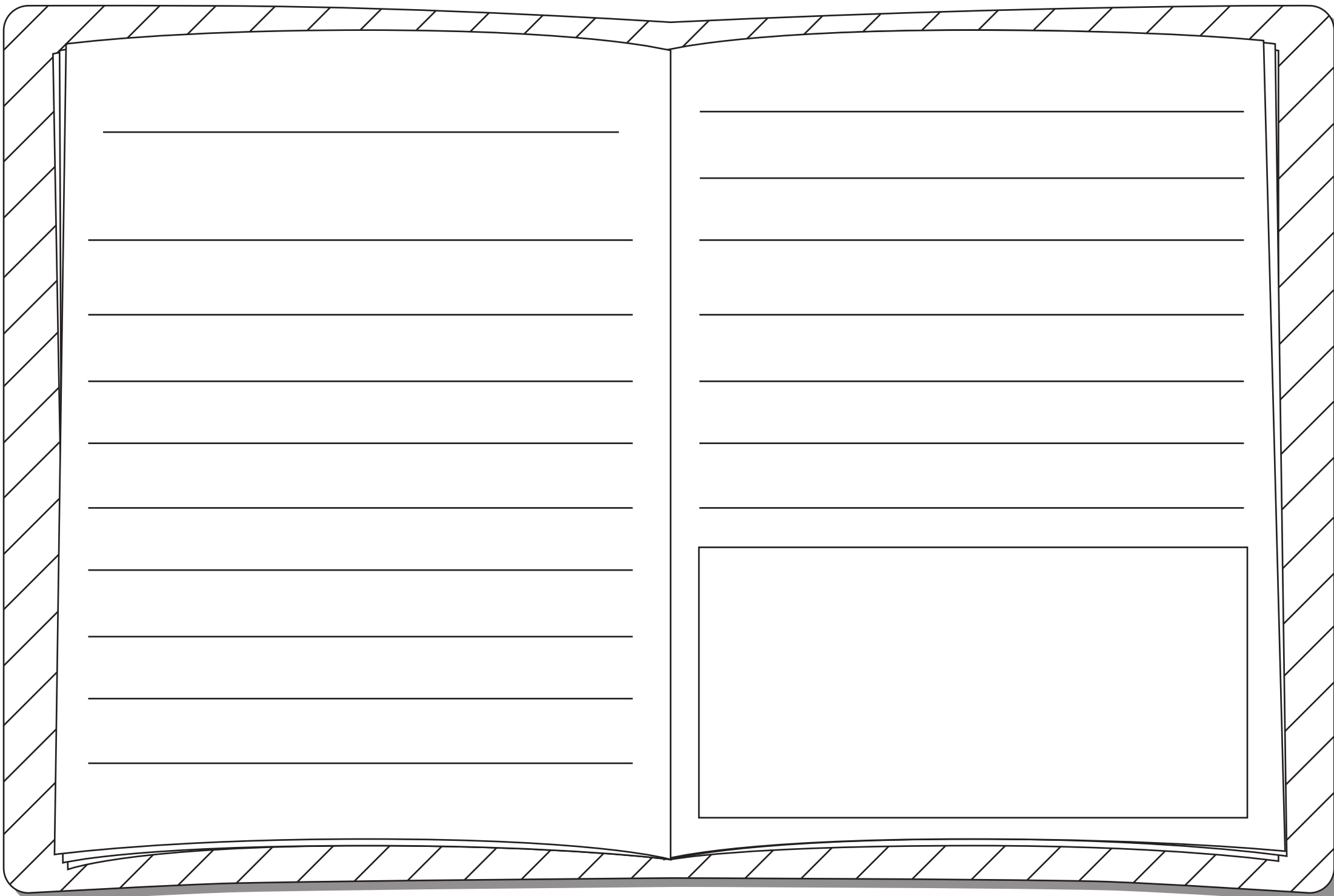
Code Breaker

Write the numbers under each letter in your spelling word. Ask a partner to try and crack your code.

a	b	c	d	e	f	g	h	i	j	k	l	m
1	2	3	4	5	6	7	8	9	10	11	12	13

n	o	p	q	r	s	t	u	v	w	x	y	z
14	15	16	17	18	19	20	21	22	23	24	25	26

Code	Spelling Word
12, 9, 20, 20, 12, 5	little

Digging in the Dictionary

Write your spelling word in the first column, the definition from the dictionary in the second column and the word in a sentence in the third column.

Spelling Word	Definition	Sentence
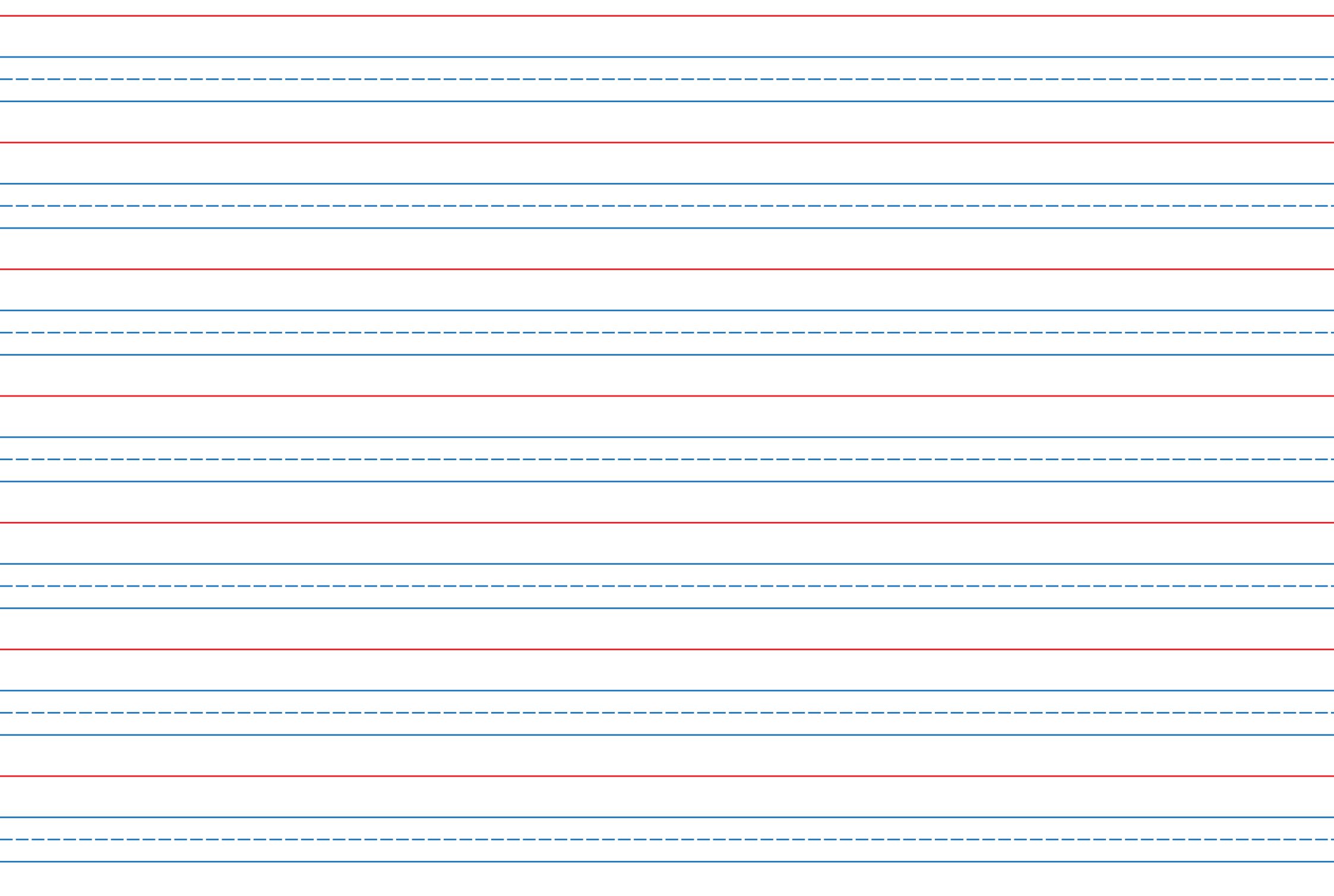
Odd One Out

Write four words for each of your spelling words. One is your spelling word, two relate to your spelling word and one is the odd word out that doesn't fit with the other three.

e.g. happy, joyful, angry, cheerful

a) _____ _____ _____ _____

b) _____ _____ _____ _____

c) _____ _____ _____ _____

d) _____ _____ _____ _____

e) _____ _____ _____ _____

f) _____ _____ _____ _____

g) _____ _____ _____ _____

h) _____ _____ _____ _____

i) _____ _____ _____ _____

j) _____ _____ _____ _____

k) _____ _____ _____ _____

l) _____ _____ _____ _____

m) _____ _____ _____ _____

n) _____ _____ _____ _____

o) _____ _____ _____ _____

Sort Them Out

Choose three different categories to sort your spelling words. A spelling word may go in more than one category.

Category 1:	Category 2:	Category 3:

Word Detective

Write three clues about each of your spelling words. Ask someone to try to guess your spelling words using your clues.

a) _____

b) _____

c) _____

a) _____

b) _____

c) _____

a) _____

b) _____

c) _____

a) _____

b) _____

c) _____

_____

_____   _____

_____   _____

_____   _____

_____   _____

_____   _____

_____   _____

_____   _____

Word Work Grid – V2

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

Syllable Words	**Working Out Words**	**Spelling Search**	**Sell Your Words**	**Cartoon Connection**
Group your spelling words according to the number of syllables. Date:_____	Group your spelling words into nouns, adjectives, verbs, adverbs etc. Date:_____	Search for spelling words or words within words in your class novel/book you are currently reading. Date:_____	Write a TV commercial for a product of your choice using as many spelling words as you can. Date:_____	Create a cartoon strip using as many spelling words as you can. Date:_____
Spelling Bee	**Define It!**	**Lie Detector**	**Script**	**Scrambled**
Write your words, definitions and sentences on the Spelling Bee Word Cards. Swap cards with a partner and ask them to spell the word. You can ask for the definition or the word used in a sentence. Date:_____	List your spelling words in the boxes on the left side of your paper and then write the definitions of each word on the right side, in random order. See if a partner can match the words and definitions correctly. Date:_____	Write a true or false statement explaining/ relating to each of your spelling words. Swap your words with a partner and see if they can correctly identify if the statement is true or false. Date:_____	Write a piece of dialogue between characters of your own creation. See how many spelling words you can use in the conversation. Use quotation marks and underline each spelling word. Date:_____	Write each of your spelling words, jumbled up, on the left side of your page. Swap with a partner and see if they can unscramble each of the words and write the correct word on the right side of the sheet. Date:_____
Editing Expert	**Texting Words**	**Word Worth**	**Crossword**	**Spelling Search**
In pairs, write a piece of text using each other's words. Spell them incorrectly, swap pieces of text and then correct the spelling of your words. Date:_____	Translate your spelling words into numbers using the phone keypad on the Texting Words Worksheet. Write the number that represents each word. Date:_____	Use the Word Worth worksheet to calculate the value for each of your spelling words. Highlight the word/s that are worth the most and the least. Date:_____	Use grid paper to make a crossword using your spelling words. Don't forget to provide clues for each word. Date:_____	Search through old magazines or newspapers to find as many spelling words as you can. Cut them out. Date:_____

Syllable Words

1 Syllable

2 Syllables

3 Syllables

4 Syllables

5 Syllables

Working Out Words

Noun

Adjective

Verb

Adverb

Cartoon Connection

Spelling Bee

Word: _____

Definition:

_____

_____

_____

Sentence:

_____

_____

_____

Word: _____

Definition:

_____

_____

_____

Sentence:

_____

_____

_____

Word: _____

Definition:

_____

_____

_____

Sentence:

_____

_____

_____

Word: _____

Definition:

_____

_____

_____

Sentence:

_____

_____

_____

Define It

Texting Words

1	**2** a b c	**3** d e f
4 g h i	**5** j k l	**6** m n o
7 p q r s	**8** t u v	**9** w x y z

T e x t i n g
$8+3+9+8+4+6+4 = 42$

_____

_____

_____

_____

_____

_____

Word Worth

A_1 B_3 C_3 D_2 E_1 F_4 G_2

H_4 I_1 J_6 K_5 L_3 M_3 N_1

O_1 P_3 Q_{10} R_2 S_1 T_1 U_1

V_4 W_4 X_8 Y_4 Z_{10}

_____

_____

_____

_____

_____

Crossword

All Families Should Own a Pet

Reasons For

- Owning a pet teaches children to be more responsible.

- Owning a pet helps to reduce loneliness and stress.

- People who own pets are healthier than people who do not.

- Sharing the care of a pet brings families closer together.

- Caring for a pet teaches children how to be loving and affectionate to others.

Reasons Against

- Some families do not have enough money to properly care for a pet.

- Some families do not have enough time to properly care for a pet.

- Some people do not like animals, or may be allergic to them.

- Some pets have diseases which they can pass on to humans.

- Animals do not belong in people's homes; they belong in the wild.

Name _____   **Date** _____

Persuasive Text – OREO Planning Template

Choose whether you are 'for' or 'against' the title statement. State your **opinion** in the box below.

Choose three **reasons** from the prompt to include in your persuasive text. Write these in the boxes below.

Reason 1:	Reason 2:	Reason 3:

Think about how to explain each reason using an **example**. Write some ideas in the boxes below.

Example 1:	Example 2:	Example 3:

Name _____   **Date** _____

Persuasive Text – Scaffold

Title _____

Opening statement (State your **opinion** about the topic of the text).

_____

_____

Reason 1 (State your first **reason** and provide an **example** to support it).

_____

_____

_____

Reason 2 (State your second **reason** and provide an **example** to support it).

_____

_____

_____

Reason 3 (State your third **reason** and provide an **example** to support it).

_____

_____

_____

Concluding statement (Restate your **opinion** about the topic of the text).

_____

_____

The rain was pouring down...

Today you are going to write a narrative (a story).

The topic you have been given for your narrative is 'The rain was pouring down...'

Think:

What do you want your story to be about? Your story might be about something that happened when it was raining, a problem that occured in the rain or a tricky situation as a result of lots of rain.

Plan:

Plan your writing before you begin and decide who your characters are, the setting of your story, the complication or problem and how it is solved and how the story will end.

Remember to check:

- your spelling and punctuation is all correct
- that you have used sentences
- that you have stayed on topic
- that you have edited your writing.

Narrative Planning Template

Title _____

Orientation

Setting	Characters	Mood

Complication

Events and Climax

Resolution

Name: _____ **Date:** _____

1 to 12 x Colour Fun!

Find the answer to the multiplication number sentence and then colour that section the corresponding colour.

4 x 2

5 x 8
7 x 6
5 x 2
10 x 6
6 x 9
9 x 10
11 x 11
8 x 7
6 x 10
9 x 6
12 x 5
11 x 11
7 x 6
1 x 3
2 x 5
2 x 5
4 x 10
3 x 8
7 x 8
12 x 5
7 x 8
8 x 3
4 x 10
11 x 11
9 x 6
6 x 7
10 x 6
8 x 7
11 x 11
6 x 9
9 x 10
10 x 6
5 x 2
7 x 6
5 x 8
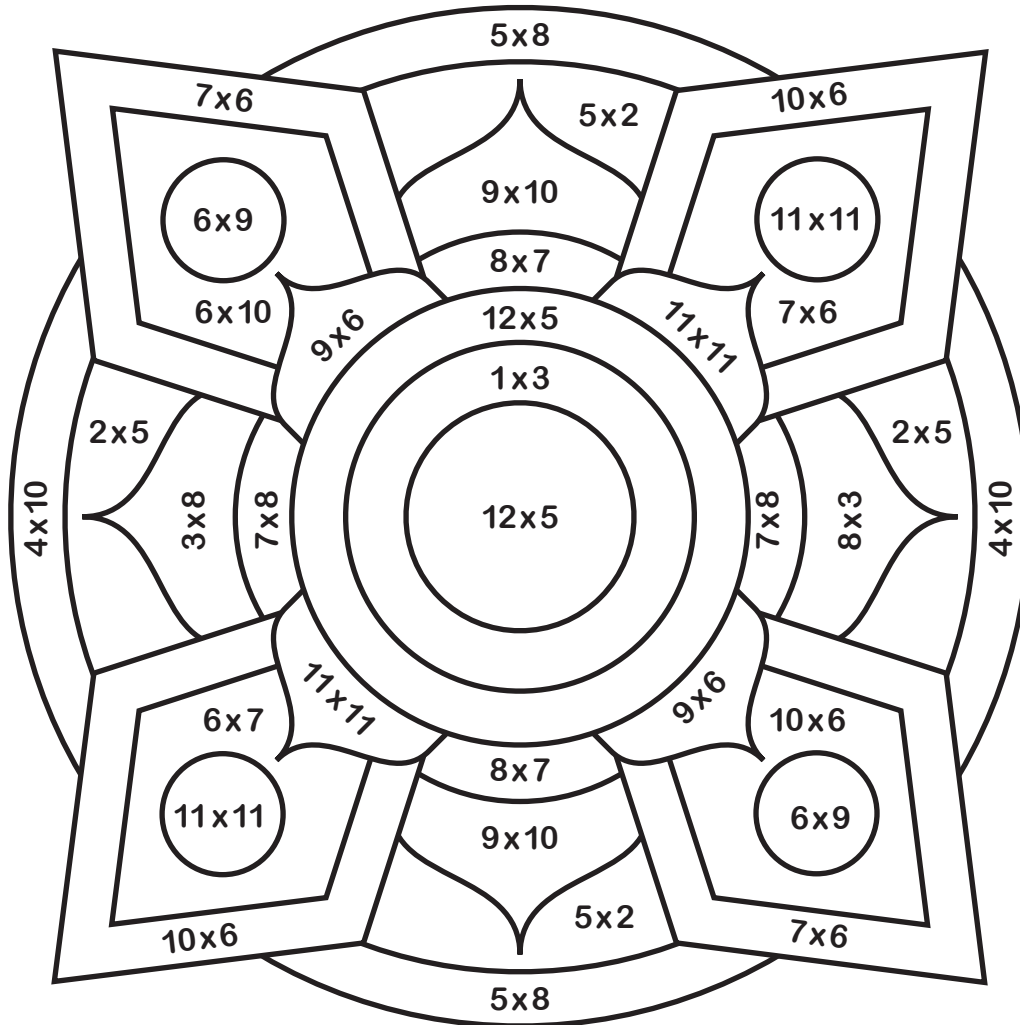
3 white	**40** orange	**90** pink
8 black	**42** dark blue	**60** light blue
10 yellow	**54** dark green	**121** light green
24 red	**56** purple	**144** brown

teachstarter

1. 100 people attended a charity dinner. $\frac{1}{4}$ of them paid £40, $\frac{1}{2}$ paid £65 and the remaining guests paid £92. How much money did the charity dinner raise?

2. 45 students and 2 teachers are at a pizza party. 23 students want 2 pieces of pizza and the remaining students and teachers want 3 pieces. Each pizza has 8 pieces. How many pizzas should they order?
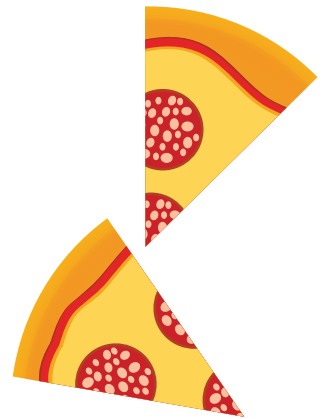
3. It is 8.30 am. Kim is waiting for the 10.45 am bus. Buses arrive every 15 minutes. How many buses will Kim see before she leaves?
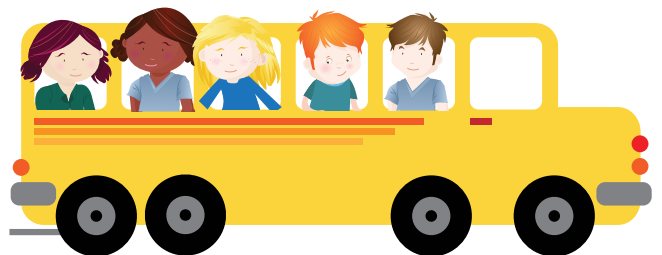
4. Lindsey caught the train from her house to the city. She went through 4 zones. Each zone costs £3.35. How much did the whole trip cost her?
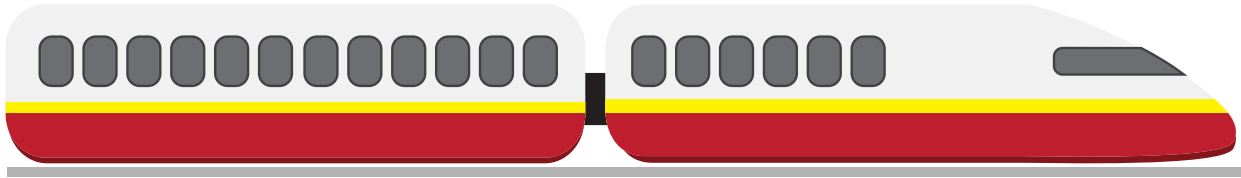
5. The airline bought 6 new planes for £385 780 each. They had to spend £12 000 on each plane to put their logo on the side. How much did they spend on the planes altogether?

6. Chloe was tiling her bathroom. She needed 105 tiles to complete the job. They come in boxes of 14. How many boxes does she need to order to make sure she has enough to tile her bathroom?
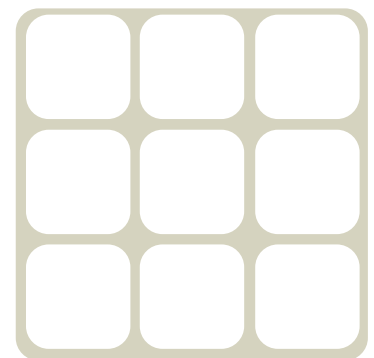
7. Alex needs 2.5 kg of ham to make sandwiches for his soccer team. The ham comes in 375 g packets. How many packets does he need to buy?
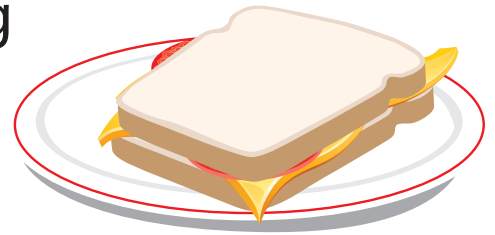
8. You bought a 12 month gym membership for £418. How much do you need to pay per month?

9. It is recommended that you drink 2 L of water every day. If your cup holds 210 ml, how many cups of water would you need to drink to have 2 L?

10. Sandy needs 14 ml of milk to make one cupcake. How much milk does she need to make 45 cupcakes?

11. 9 friends were paid £385 to clean up the local lake. How much does each person receive?

12. You are holding a party and you will need 35 cups. Is it better value to buy a packet of 40 cups for £8.00 or 7 packets of 5 cups for £1.20 each?

13. 4 boys weigh 165 kg combined. If two of the boys weigh 92 kg combined and another boy weighs 34 kg, what does the fourth boy weigh?

14. The local soccer club is looking to purchase new balls for their 192 players. They need 5 balls for every 20 players. How many balls do they need?

15. The average distance from the Earth to the Moon is 384 000 km. The length of a marathon is 42 km. If you could run from the Earth to the Moon, how many marathons would you have run?
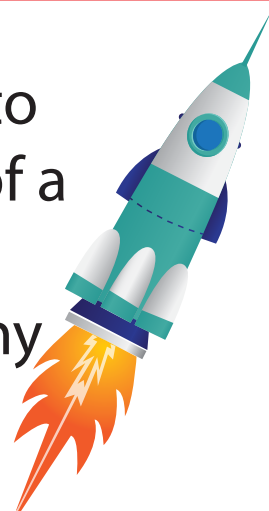
16. On average, 4 babies are born every second world-wide. How many babies are born every 10 minutes?

17. Crack the code! The first number is 1.5 times the second number. The third number is one third of the first number. The fourth number is 2, which is one third of the value of the second number.

∗ ∗ ∗ ∗
— — — —

18. Your car's wheels rotate 600 times per km. If your car needs new tyres every 50 000 km, how many times will your tyres rotate before they need to be replaced?
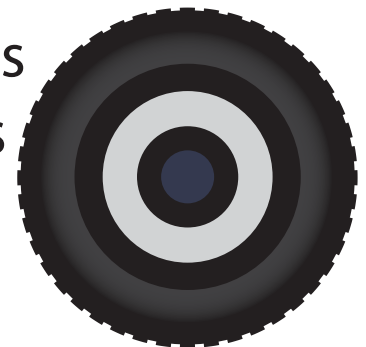
19. Neil loves running! He runs 8 km every week. After running 190 km, his shoes need to be replaced. How often does Neil replace his shoes?

20. Ralph eats 2 bowls of food each day. If a bowl contains 400 g of dog food and a bag of dog food contains 20 kg, how often does Ralph need a new bag of dog food?

Maths Investigation –

Fractions

Renovate with a Rug!

The Scenario

A popular home renovation show is holding a design competition. School children around the country have been asked to submit designs for a colourful floor rug to be featured in a newly-renovated home. Your class has decided to enter. If your class design is chosen, it will be made into a rug and then featured on the show. Your teacher has asked each student in your class to submit a design for the floor rug. The class will then vote on the best design. The most popular design will be entered into the competition.

The Task

Design a colourful floor rug to be entered into the home renovation show's design competition. Follow the competition rules, set out below.

Competition Rules

The producers of the television show have written the following list of competition rules:

• All floor rug designs must be submitted on the template provided. The template is a large rectangle, consisting of six rows of smaller squares, with four squares in each row (24 squares all together).

• Only primary and secondary colours may be used in the design. These colours are red, blue, yellow, purple, orange and green. Each of these colours must be used at least once on the design.

• Colours should be placed thoughtfully to create a pattern. Designs that do not display any kind of colour pattern will be disqualified.

• All squares on the floor rug design must be coloured with at least one colour. A maximum of two colours is allowed in each square. The number of squares per colour must add to a whole number.

• All competitors must provide a mathematical analysis of their floor rug design, using the worksheets provided. This will assist the producers to order coloured fabrics for the winning design.

The Procedure

1. Check your understanding of the task

Carefully read through the task and the list of competition rules. If there are any instructions that you do not understand, ask your teacher to explain them to you.

2. Plan your design

Plan a colourful design for your floor rug. A blank template is provided for you. Remember, according to the competition rules, the placement of colours must create a pattern.

3. Check your design

Reread the list of competition rules. Carefully check that you have designed your floor rug in accordance with these. Make sure that your design has not broken any of the competition rules, either!

4. Create your floor rug

Draw and colour your floor rug design using the second blank template.

5. Analyse your design

Use your knowledge and understanding of fractions to answer a series of questions about your floor rug design.

6. Present your design to the class. Explain how you met all of the competition rules. As a class, vote on each floor rug to determine the most popular design.

The Materials

- Two blank rug templates
- A lead pencil
- coloured pencils or markers
- A ruler
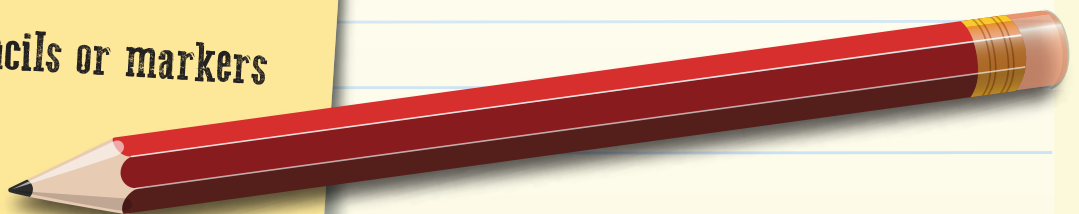
FLOOR RUG
TEMPLATE -
DRAFT

FLOOR RUG
TEMPLATE -
FINAL

Name _____   **Date** _____

Recording and Analysing

1. Count how many squares of each colour appear on your floor rug design.
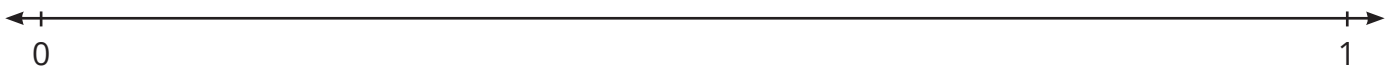   Record your answer for each colour as a fraction of the whole rug.

   red:_____

   blue: _____

   yellow:_____

   purple:_____

   orange: _____

   green:_____

2. Place the fractions for each colour in ascending order.

   _____

3. Use any strategies that might help you (finding equivalent fractions, segmenting, estimation) to place each fraction from Question 1 on the number line.
   Write each fraction in the colour it represents.

0 ─── 1

4. Use <, > or = to make these statements true for your floor rug design.

   a) red _____ yellow   f) purple _____ yellow

   b) blue _____ purple   g) blue _____ red

   c) yellow _____ orange   h) yellow _____ purple

   d) purple _____ green   i) blue _____ orange

   e) green _____ orange   j) red _____ green

Name _____   **Date** _____

5. Use the fractions you created in Question 1 to answer the following addition questions, based on your floor rug design.

Show your working.

Simplify your answers.

a) red + blue + yellow =	b) purple + orange + green =
c) red + yellow + orange =	d) blue + purple + green =

6. Use the fractions you created in Question 1 to answer the following subtraction questions, based on your floor rug design.

Show your working.

Simplify your answers.

a) whole rug – primary colours =	b) whole rug – secondary colours =
c) greatest fraction – smallest fraction =	d) a primary colour – a secondary colour =

Name _____   **Date** _____

Reflection

1. Did you enjoy working on this investigation? Give reasons to explain your answer.

_____

_____

_____

_____

2. Did you face any challenges during the investigation? If so, how did you overcome them?

_____

_____

_____

_____

3. How do you feel about your rug design? Is there anything you would change if you repeated the task?

_____

_____

_____

_____

4. What new knowledge and skills did you learn by completing this investigation?

_____

_____

_____

_____

5. Circle the statement that best suits how you feel about fractions after completing this investigation.

    a) I feel very confident working with fractions.

    b) My understanding of fractions is improving.

    c) I still need some help when working with fractions.

PANDORA'S PARTY PALACE

Snacks

£5.95
Potato Chips
10 packets per pack

£3.25 Sultanas
6 boxes per pack

£5.50
Popcorn
10 packets per pack

Lunch Items

£4.00
Chicken Nuggets
20 pieces per box

£8.00 Mini Pizzas
6 pizzas per box

£20.00 Sushi
20 rolls per pack

25% OFF

Sweet Treats

£3.50 Chocolate Cupcakes
10 per box

£5.99 Yoghurt Iceblocks
10 per box

£2.18 Lollipops
Pack of 12

Drinks

£2.75
Water
6 x 250 mL bottles

£10.75 Lemonade
10 x 375 mL bottles

£5.50 Juice
6 x 250 mL boxes

FOOD

PANDORA'S PARTY PALACE

Decorations

£1.89 — **Party Hats** 5 hats per pack

£2.80 — **Balloons** 20 per pack

£2.10 — **Streamers** 2 rolls per pack

£2.40 — **Bunting** 1 x 3 m pack

£1.68 — **Party Poppers** 10 per pack

£3.20 — **Party Blowers** 10 per pack

Serving Supplies

10% OFF

£2.50 — **Paper Plates** 20 plates per pack

£3.00 — **Paper Cups** 25 cups per pack

£1.10 — **Straws** Box of 50

£2.80 — **Plastic Tablecloth** 1 per pack

£1.50 — **Serviettes** 100 per pack

£4.50 — **Wet Hand Wipes** 100 wipes per tub

Decorations and Serving Supplies

teachstarter

PANDORA'S PARTY PALACE

Lucy is buying some sweet treats for a party. She needs at least 80 sweet treats, but she doesn't want more than 100.

What combinations of sweet treats could Lucy buy for the party?

List some possibilities.

Calculate the total cost of the sweet treats for Lucy's party.

PANDORA'S PARTY PALACE

Taylor's class was having an end-of-year party. Taylor was asked to bring the drinks. His budget for the drinks was £40.

What combinations of drinks could Taylor buy for the class party?

List some possibilities.

Check that the drinks don't cost more than £40.

PANDORA'S PARTY PALACE

Mario is planning a pizza party for his birthday. He needs 36 mini pizzas to feed his friends.

How many boxes of mini pizzas does Mario need to buy?

Calculate the total cost of the mini pizzas for Mario's birthday party.

PANDORA'S PARTY PALACE

Amy's friends came over to her place for a movie night. Amy bought 5 packs of popcorn to share with her friends.

How many snack-size popcorn packets did Amy have at her movie night?

Calculate the total cost of 5 packs of popcorn.

PANDORA'S PARTY PALACE

Mrs Small bought some party decorations for a surprise party for her class.

Mrs Small bought:

- 6 packs of streamers
- 4 packs of bunting
- 3 packs of party blowers.

How much did Mrs Small spend on decorations for the party?

PANDORA'S PARTY PALACE

Daniel and his family were going on a picnic with his cousins. Daniel's family was asked to bring the paper plates, cups and serviettes.

If there were 55 people were going to the picnic, how many packs of paper plates, cups and serviettes did Daniel's family have to buy?

How much did Daniel's family spend on serving supplies?

PANDORA'S PARTY PALACE

Sam decided to buy sushi rolls and chicken nuggets for his birthday party. He wanted each guest to have 6 pieces of sushi and 6 chicken nuggets.

If Sam invited 12 guests, how many boxes of chicken nuggets and packs of sushi did he need to buy?

Calculate the total cost for Sam's party food.

PANDORA'S PARTY PALACE

As a special treat, Mr Wright wants to buy his class lollipops.

If there are 32 children in the class, calculate for Mr Wright:

- the total number of packs of lollipops
- the total cost of the lollipops.

PANDORA'S PARTY PALACE

Coach Carter needs enough bottles of water to give one to each player for the soccer gala day.

If 63 players are attending the soccer gala day, how many six packs of water should Coach Cater buy?

Calculate the total cost for the water.

PANDORA'S PARTY PALACE

Class 6A was having a cake stall to raise money for some new play equipment. They bought 14 boxes of cupcakes from Pandora's Party Palace and sold each cupcake at the stall for 50 pence.

Calculate:
• the total cost of the cupcakes
• the total profit made from the cake stall.

PANDORA'S PARTY PALACE

Naomi wants to decorate her house with bunting to welcome her grandparents back from an overseas trip.

Naomi needs 14 m of bunting to decorate the house.

Calculate how many packs of bunting Naomi must buy and the total cost of the bunting.

PANDORA'S PARTY PALACE

As part of their end-of-school year celebration, Principal Jones bought yoghurt ice blocks for every child in the school.

If there were 472 students in the school, how many boxes of yoghurt ice blocks did Principal Jones buy?

Calculate the total cost for the ice blocks.

PANDORA'S PARTY PALACE

For a science experiment, Professor Paleo needed 180 balloons and 360 paper cups.

Calculate for the experiment:

- the total packs of balloons
- the total packs of paper cups
- the total cost for the balloons and cups.

PANDORA'S PARTY PALACE

On the weekend, Jenny had a party for her 12th birthday. Calculate the total cost if Jenny bought:

- 3 packs of balloons
- 4 packs of streamers
- 5 packs of bunting
- 4 boxes of yoghurt ice blocks
- 10 boxes of chicken nuggets
- 5 packs of popcorn
- 10 bottles of lemonade.

PANDORA'S PARTY PALACE

To help celebrate New Year's Eve, Lilly bought some decorations from Pandora's Party Palace. Her budget for decorations was £100.

What combinations of decoration could Lucy buy for New Year's Eve?

List some possibilities, and then calculate the total cost Lilly spent on decorations.

PANDORA'S PARTY PALACE

You have been given a budget of £200 to organise your own party, using items from Pandora's Party Palace.

After deciding on how many guests you will invite, make a list of the items you will buy and their total costs.

Calculate the total cost of the party to check that you have come in under budget.

What are Adaptations?

Read the passage about adaptations, then answer the questions below.

Adaptation is the process which enables organisms to adjust to their environment in order to ensure their survival. This process is sometimes referred to as the evolution of species.

Adaptations often occur because of a genetic mutation. A genetic mutation is an alteration an organism is born with. For example, a bird may be born with a slightly longer beak; a shark may be born with slightly stronger fins or a frog may be born with slightly longer legs. If these mutations are successful, and help the animal to thrive in their environment, the animal may pass the same characteristic on to their offspring. As time passes, the mutation may eventually be found in all members of that species. However, this process is very slow.

There are three types of adaptations; structural, behavioural and physiological. Most animals and plants will have a combination of these three types of adaptations.

Structural adaptations are the physical features of an organism that enable them to survive in their environment. For example, a penguin has thick blubber to protect itself from the freezing Antarctic temperatures. Camels can close their nostrils, to prevent desert sand from entering their noses. Rainforest trees have wide, waxy leaves so the rain runs off them easily.

Behavioural adaptations are the actions of an organism that enable them to survive in their environment. For example, bears hibernate in winter to escape the cold temperatures and preserve energy. Lizards seek out the morning sun to warm up their cold-blooded bodies more quickly. Fish swim together in groups (or schools) to protect themselves from predators.

Physiological adaptations are internal or cellular features of an organism that enable them to survive in their environment. For example, snakes produce poisonous venom to ward off predators and to capture prey. Some plants contain toxins to prevent them from being eaten by herbivorous animals. The Australian koala has a slow metabolism which keeps their food in their digestive system for longer, giving them as much energy as possible from their limited diet.

Questions

1) In your own words, describe the adaptation process.

_____

_____

_____

2) What is a genetic mutation? Provide one example.

_____

_____

_____

3) What might happen if a genetic mutation proves to be successful?

_____

_____

_____

4) What are the three types of adaptations? Provide an example of each.

_____

_____

_____

_____

_____

5) Decide whether the following statements are true or false.

a) Evolution is a very speedy process.   True / False

b) An animal may pass a genetic mutation on to its offspring.   True / False

c) Plants do not have structural adaptations.   True / False

d) Animals can change their behaviour to better suit their environment.   True / False

e) Physiological adaptations can be difficult to see from the outside.   True / False

Earthly Word Search

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R  E  M  O  N  O  R  T  S  A  W  A  P  V  I
A  V  O  R  B  I  T  E  C  I  K  X  Y  L  B
G  L  U  N  A  R  D  S  O  R  D  I  K  R  R
F  A  U  R  O  R  A  A  C  Q  P  S  U  F  A
R  P  F  T  H  Z  F  H  E  V  T  I  L  T  L
O  V  U  N  R  E  V  P  M  D  H  D  X  F  O
T  N  N  E  A  P  P  Y  L  T  I  N  D  W  S
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O  G  G  R  D  I  G  N  G  I  B  B  O  U  S
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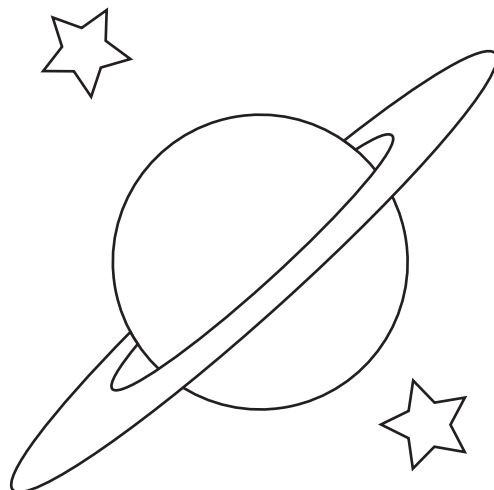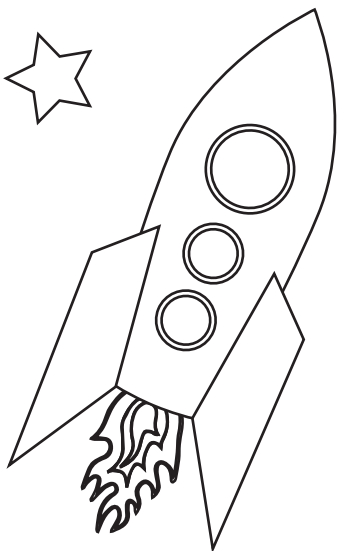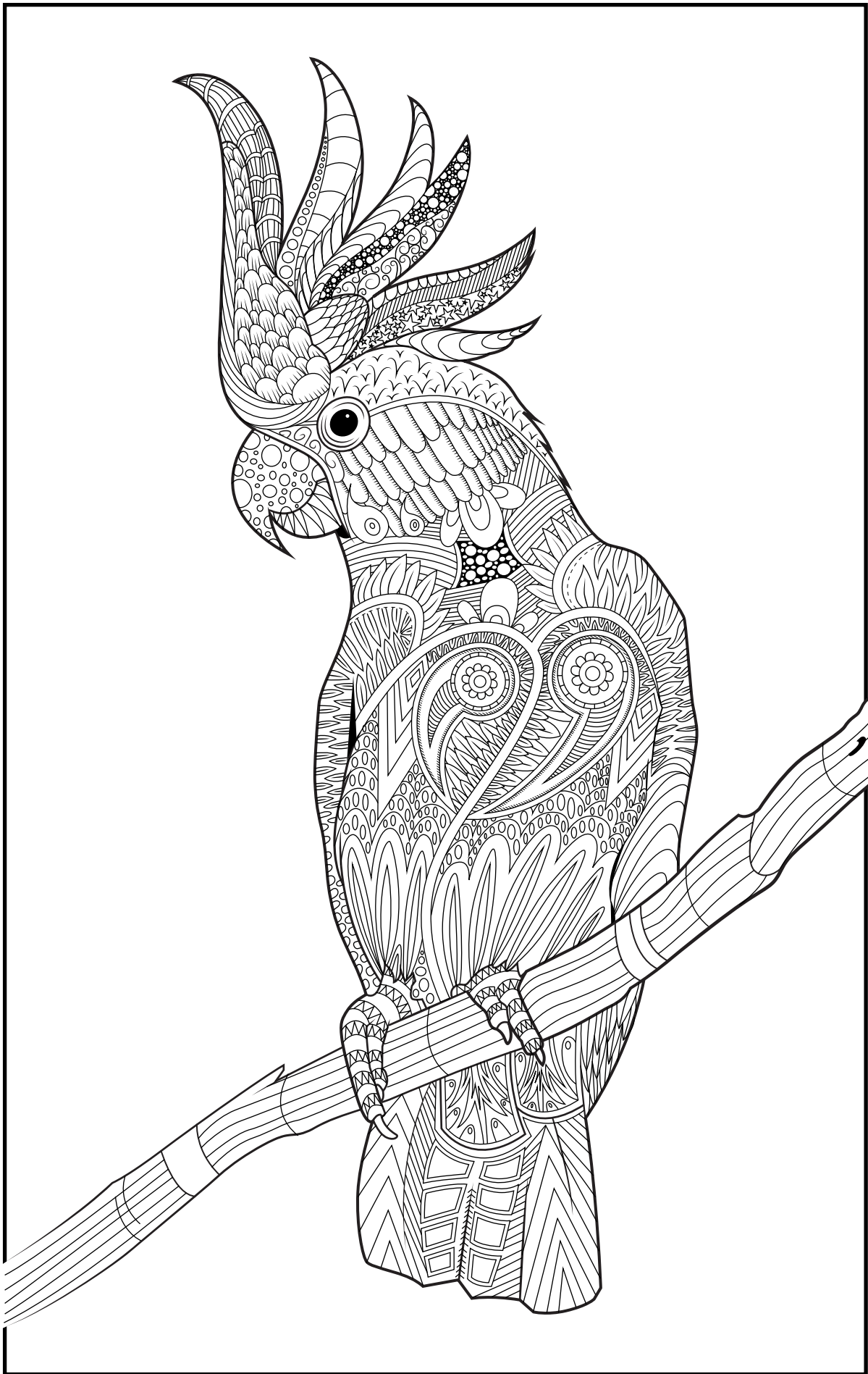
EARTH	AXIS	LUNAR	ORBIT
WANING	ECLIPSE	ASTRONOMER	NEAP
CRESCENT	TIDE	CORONA	GIBBOUS
PHASE	MOON	ROTATION	SOLAR
TILT	AURORA	SUN	WAXING
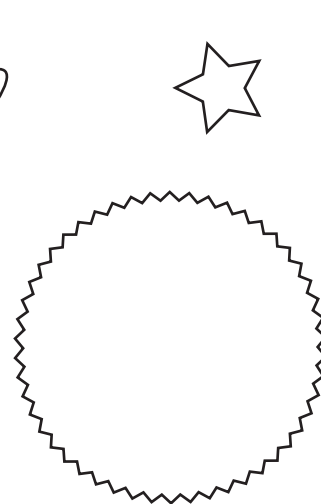
MOVING LINES

Task

Experiment with using line to create movement, in the style of Op Art. You may choose to work in black and white or in two contrasting colours.
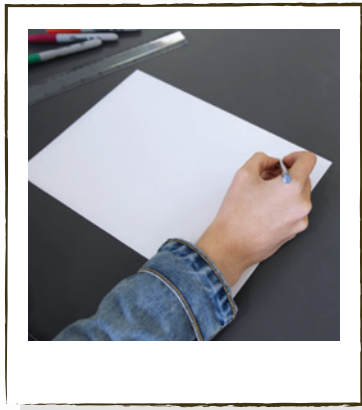
Materials

A lead pencil

White card

Ruler

2 contrasting coloured felt pens OR a black felt pen

Ideally, fine-tip felt pens in the same colour

Procedure

1. Using your lead pencil, place a small, off-centre dot in the top (or bottom) third of the card.

2. Using a ruler, draw 6 lines that start at the edge of the page and pass through the dot, so the lines all intersect. Each line should start and finish at an edge. These intersecting lines will create triangular sections. Try to place your lines so that the sections are different widths, i.e. they're not all equidistant.
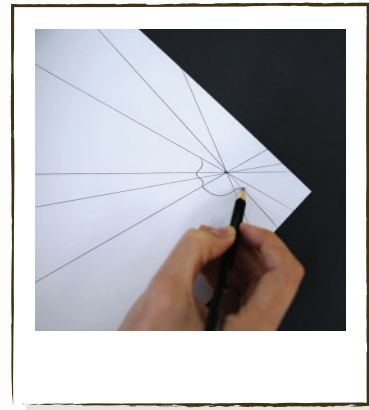
3. Start in one triangular section and draw a curved line across to the next section. Join this section to the next, but change the direction of the curve.

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Procedure (cont.)

4. Continue creating concentric curved lines, alternating the direction of the curve for each section. Gradually widen the bands as you move away from the dot where the lines intersect.

5. You will need to colour alternate segments until they resemble a chequerboard. To avoid mistakes, label each segment in pencil first, so you know which colour to use.
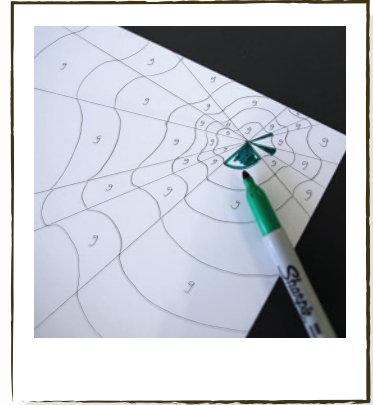
6. Start at the point where the lines intersect. Choose 1 colour and begin to fill in the alternating segments. Work your way around the design. It is best to use a fine-tipped pen at first, because the segments close to the dot are so small.

7. Gradually work your way out from the centre, shading the segments and using a thicker felt pen once the segments become larger.

8. If you are working in a single colour, or in black and white, leave the rest of the segments white. If you are using a second colour, fill the contrasting segments in the same way.

9. When you are finished, your artwork should confuse the eye and appear to move by itself.