

Alexander Fleming

8 During the First World War, scientist Alexander Fleming
16 noticed that standard medicine wasn't helping to keep
24 infection away in soldiers who had serious injuries.
35 Knowing that it was a type of bacteria that was causing
46 these infections, he started looking for a way to kill the
47 bacteria.

56 After returning from holiday, he noticed that there was
66 mould growing in the small dishes of bacteria that he
73 had been conducting his experiments in. Amazingly,
81 Fleming discovered that the mould (now known as
89 penicillin) had eliminated the bacteria. He named this
93 new mould an 'antibiotic'.

103 Today, penicillin can be prescribed by a doctor and used
112 to treat bacterial infections that won't get better on
114 their own.



Questions



1. What did Alexander Fleming name the new mould?
- ☐ a bacteria
 - ☐ an infection
 - ☐ an antibiotic
 - ☐ a small dish



2. Find and copy one word which means the same as 'recommended'.
- _____



3. Describe how you think Alexander Fleming felt when he saw that the mould had eliminated the bacteria.
- _____
- _____



4. Using 15 words or fewer, summarise Alexander Fleming's discovery.
- _____
- _____

Thursday 10th September

TBAT: understand how the writer creates a sense of fear through word choice.

The terrors came fast, one upon another. The lights of the Peggy Sue went away into the dark of the night, leaving me alone in the ocean, alone with the certainty that they were already too far away, that my cries for help could not possibly be heard. I thought then of the sharks cruising the black water beneath me - scenting me, already searching me out, homing in on me - and I knew there could be no hope. I would be eaten alive. Either that or I would drown slowly. Nothing could save me.

Thursday 10th September

TBAT: understand how the writer creates a sense of fear through word choice.

Work out the meaning of words in context.

The terrors came fast, one upon another. The lights of the Peggy Sue went away into the dark of the night, leaving me alone in the ocean, alone with the certainty that they were already too far away, that my cries for help could not possibly be heard. I thought then of the sharks **cruising** the black water beneath me - **scenting** me, already searching me out, **homing in on me** - and I knew there could be no hope. I would be eaten alive. Either that or I would drown slowly. Nothing could save me.

Thursday 10th September

TBAT: understand how the writer creates a sense of fear through word choice.

Author's Choice of Language

1. What tells us the narrator's problems happen quickly?
2. Which word is repeated and why?
3. What effect is created by the list:
"scenting me, already searching me out, homing in on me"?

Challenge -

Why are the final three sentences so short?

"I would be eaten alive. Either that or I would drown slowly. Nothing could save me."

The terrors came fast, one upon another. The lights of the Peggy Sue went away into the dark of the night, leaving me alone in the ocean, alone with the certainty that they were already too far away, that my cries for help could not possibly be heard. I thought then of the sharks cruising the black water beneath me - scenting me, already searching me out, homing in on me - and I knew there could be no hope. I would be eaten alive. Either that or I would drown slowly. Nothing could save me.

Times Tables

1. $6 \times 8 = \underline{\quad}$

2. $4 \times 7 = \underline{\quad}$

3. $5 \times 1 = \underline{\quad}$

4. $3 \times 10 = \underline{\quad}$

5. $1 \times 11 = \underline{\quad}$

6. $10 \times 3 = \underline{\quad}$

7. $9 \times 12 = \underline{\quad}$

8. $12 \times 11 = \underline{\quad}$

9. $12 \times 2 = \underline{\quad}$

10. $9 \times 9 = \underline{\quad}$

21. $7 \times 9 = \underline{\quad}$

22. $8 \times 4 = \underline{\quad}$

23. $12 \times 2 = \underline{\quad}$

24. $9 \times 2 = \underline{\quad}$

25. $12 \times 8 = \underline{\quad}$

26. $9 \times 10 = \underline{\quad}$

27. $6 \times 9 = \underline{\quad}$

28. $11 \times 6 = \underline{\quad}$

29. $7 \times 12 = \underline{\quad}$

30. $8 \times 3 = \underline{\quad}$

41. $8 \times 4 = \underline{\quad}$

42. $11 \times 6 = \underline{\quad}$

43. $4 \times 7 = \underline{\quad}$

44. $2 \times 8 = \underline{\quad}$

45. $7 \times 1 = \underline{\quad}$

46. $9 \times 6 = \underline{\quad}$

47. $2 \times 9 = \underline{\quad}$

48. $10 \times 4 = \underline{\quad}$

49. $11 \times 9 = \underline{\quad}$

50. $7 \times 6 = \underline{\quad}$

10.09.26

TBAT: convert decimals (up to 3 places) to fractions and vice-versa.

3 in 3

1. $4,328 - 3,688 =$

2. $45,543 + 81,407 =$

3. $(10 \times 5) + 46 =$

Challenge – List all the factor pairs of 36.

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TBAT: convert decimals (up to 3 places) to fractions and vice-versa.

Match the fractions to their decimal equivalents.

A. $\frac{6}{100}$

0.6

B. $\frac{6}{10}$

0.65

C. $\frac{65}{100}$

0.06

What is $\frac{1}{5}$ as a decimal and a percentage?

10.09.26

TBAT: convert decimals (up to 3 places) to fractions and vice-versa.

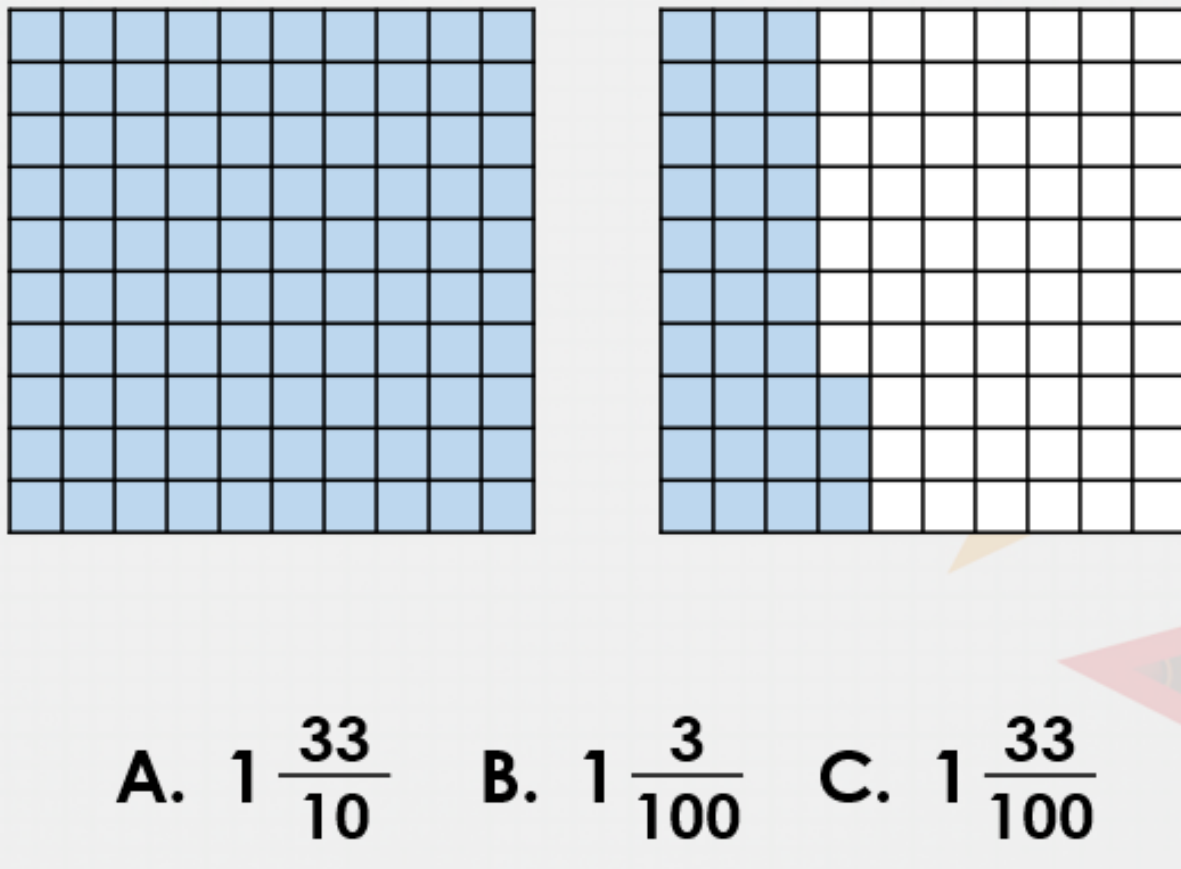
Fractions	Decimals
$\frac{25}{100}$	
	0.07
$\frac{1}{2}$	

True or false? $\frac{3}{4} = 3.4$

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TBAT: convert decimals (up to 3 places) to fractions and vice-versa.

Which fraction is represented?



Can you write it as a decimal number?

10.09.26

TBAT: convert decimals (up to 3 places) to fractions and vice-versa.

Convert these decimals into fractions

0.5

0.66

0.25

0.05

1.5

1.05

10.09.26

TBAT: convert decimals (up to 3 places) to fractions and vice-versa.

Convert these fractions into decimals.

1/10

66/100

1/100

6/10

2 3/4

11.09.24

TBAT: convert decimals (up to 3 places) to fractions and vice-versa.

Solve the word problem below.

I am thinking of a decimal number.

It is bigger than $\frac{4}{10}$.

It is smaller than $\frac{3}{4}$.

What number could I be thinking of?

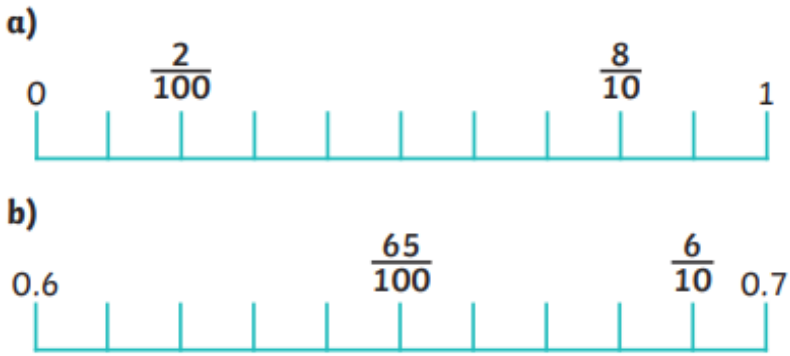
TBAT: convert decimals (up to 3 places) to fractions and vice-versa.

Decimal	Fraction
0.9	
	$\frac{8}{100}$
	$\frac{4}{10}$
0.49	
0.04	
	$\frac{63}{100}$

RP – Jenny scored 75% on her SATs test. Jill scored 5% more than Jenny. Write your answer as a decimal and percentage.

Challenge

Terri has placed fractions on a decimal number line. Tick the ones which are correct. Draw a circle around those which are incorrect and explain what the right answer should be.



Mastery Challenge

Which is the odd one out? Explain your reasoning

- A

$\frac{68}{200}$
- B

0.34
- C

0.034
- D

$\frac{34}{100}$

Mastery with Greater Depth

These children are sharing a pizza. There is a fraction of the pizza left. How much could Priya have eaten? Find all the possibilities.



I have eaten $\frac{9}{20}$ of the pizza.

Hari



I have eaten 0.25 of the pizza.

Abi



I have eaten more of the pizza than Abi and less than Hari.

Priya

Thursday 10th September

TBAT: revise simple and compound sentences.

2 in 2

Tick the option that shows how the underlined words are used in the sentence.

Ben’s boss, who was called Mr. Newman, was often very demanding.

as a main clause

☐

as a noun phrase

☐

as a prepositional phrase

☐

as a relative clause

☐

Challenge –
How many
collective
nouns can
you think of?

Sort the words below into the correct word class columns:

wept

beside

lovely

healthy

yesterday

into

nervously

take

Verb	Adverb	Adjective	Preposition

Sentences are punctuated with capital letters and full stops.

soon, the temperature will be too high
and we will need to come in try to
make the most of your time outside



Soon, the temperature will be too high
and we will need to come in. **T**ry to
make the most of your time outside.

we saw uncle dan on tuesday in liverpool
at a spanish restaurant for mum's
birthday



We saw **U**ncle **D**an on **T**uesday in
Liverpool at a **S**panish restaurant for
Mum's birthday.

We also use capital letters for proper nouns - specific named things, people and places.



Partner discussion - Insert all the capital letters and full stops that are needed in this passage.

on friday, we will be visiting manchester we are planning to go to the people's
history museum we also want to see manchester united's stadium if we have time
because dad is a big fan

On Friday, we will be visiting **Manchester**. **We** are planning to go to the **People's
History Museum**. **We** also want to see **Manchester United's** stadium if we have
time because **Dad** is a big fan.

my **d**ad gave it to me - no capital because we are not using it as his name

Dad gave it to me - capital because we are using it as his name

A **main clause** is a group of words that contains a verb and makes complete sense on its own.

We have to make some sacrifices.

Do you find this awkward?

A **simple sentence** is made of one **main clause** and one idea and it makes complete sense.

A **compound sentence** is formed of two or more **main clauses** joined by a **co-ordinating conjunction** (**but, or, and** - BOA).

You can listen to my explanation, **or** you can see me at break time.

main clause

co-ordinating conjunction

main clause

In each sentence, what is the grammatical term for the highlighted word or group of words?

a We have a responsibility to act and **we must act fast**.

This is a **main clause** because it contains a verb and it makes complete sense; it could be a sentence on its own.

b We have a responsibility to act **and** we must act fast.

This is a **co-ordinating conjunction** because it joins two **main clauses** together to make a **compound sentence**.

c **We have a responsibility to act**.

This is a **simple sentence** made up of only one **main clause**. It makes complete sense on its own and it offers a fact so it is a statement.

Each **co-ordinating conjunction** has a different purpose in a **compound sentence**.

- We could go to the park **and** we could play cricket.
- We could go to the park, **but** the weather is looking ominous.
- We could go to the park, **or** we could stay in and play board games.

We use a **comma** before '**but**' and '**or**'.

We don't use a **comma** before '**and**'.

Co-ordinating conjunctions can be used to join longer sentences too:

- Because our team won the competition, Mr Martinez took us to a café on the way home **and** he bought us bacon sandwiches, which we ate on the minibus.

Find the **co-ordinating conjunction** in each sentence and add any punctuation that's needed.

a

When we arrived at the accommodation, we were ready to fall asleep, **but** someone in the room next door was making a terrible racket, which kept us up half the night.

b

On Thursday, we will have to really work hard on these stories, **or** we won't have time to publish them in time for Parents' Evening.

c

As we were walking through the dark forest, we felt branches brush our skin **and** we saw shadows flitting through the trees, darting in and out of view.

For each sentence, do the following:

- Choose an appropriate **co-ordinating conjunction** to fill the gap.
 - Add in any capital letters and punctuation (including **commas**).
- a) miss o'neill listened carefully when i told her what alex had done _____ i knew she would do her best to solve the problem before monday
- b) after the yacht left spain, it headed towards france _____ a storm blew it off course out into the atlantic ocean
- c) "you can do this now _____ you can complete it in your own time," mr martinez scowled during english, writing sam's name on the board

For each sentence, do the following:

- Choose an appropriate **co-ordinating conjunction** to fill the gap.
 - Add in any capital letters and punctuation (including **commas**).
- a) Miss O'Neill listened carefully when I told her what Alex had done and I knew she would do her best to solve the problem before Monday.
- b) After the yacht left Spain, it headed towards France, but a storm blew it off course out into the Atlantic Ocean.
- c) "You can do this now, or you can complete it in your own time," Mr Martinez scowled during English, writing Sam's name on the board.

There are four types of **simple sentence**.

statement	It was so awkward! Mr Martinez asked me to take part.
command	Do your work! To begin, press the red button.
exclamation	How well they played! What a wonderful day it was!
question	Will you take part in the competition? Do you have any suggestions? How on earth did you survive? What do you want to achieve here?

Notice that we can use the **same word** to start different types of sentence.

We see that three types of sentence can end with an exclamation mark to show **strong emotions**.

Which sentence should **not** end with an exclamation mark?

a

Put the ball down!

b

What a ridiculous idea that is!

c

What is wrong with you?

d

I couldn't believe my eyes!



We can use exclamation marks for **statements** and **commands** if they are showing a strong emotion - it's the author's choice.

We have to look carefully at sentences to decide what type they are.

- What are you doing?
- What a good job you are doing!

- Jun wondered if he should go.
- Should we go?

- Do you want to succeed?
- Do your very best work.

- question
- exclamation

An **exclamation** always starts with **what** or **how**.

- statement
- question

A **command** always contains an **imperative verb**.

- question
- command

Tick one box in each row to show the sentence type for each **simple sentence**.

	statement	question	command	exclamation
How extraordinarily good it is to see you!				✓
How thoroughly have you checked this?		✓		
She asked me to check thoroughly.	✓			

Which of these **simple sentences** should end with a question mark?

a

What a terrible mess you have made!



b

What happened next was shocking.



c

What would you suggest we do?



d

How on earth do you expect to succeed?



Laura wants to know when the competition starts.
What **question** could she ask to find out?

when does the competition start



When does the competition start?



Sofia is shocked by the noise. What **exclamation** could she say?

This is a loud noise!



What a loud noise!



What a loud noise this is!



Alex's dad wants to remind his children to remove their shoes.

Write a **command** he could place on a sign by the front door.

Please take off your shoes.

Alex wants to know why he should remove his shoes.

Write a **question** he could say.

Why do I need to take off my shoes?

We can rewrite a question as a statement by changing the order of the words.

Will you finish your story by lunch?



You will finish your story by lunch.

We can also do this in reverse.

She might be able to visit.



Might she be able to visit?

Change this statement into a question:

You can join the committee this year.

Can you join the committee this year?

Change this question into a statement:

Tomorrow, shall we go and visit my neighbour?

Tomorrow, we shall go and visit my neighbour.

1. Rewrite each sentence with closing punctuation and say what type of simple sentence it is.

- a) what a nuisance you are causing
- b) what are you doing on the twelfth
- c) what she did was unacceptable
- d) come to my room immediately

Remember, we can use exclamation marks for **statements** and **commands** if they are showing a strong emotion.

2. Turn this simple sentence into a compound sentence using a conjunction that shows contrast.

- a) The dragon looked fierce. It was actually very friendly.
- b) The explorers were exhausted. They continued their journey.

Challenge - A child writes: "*The storm grew stronger and the sailors became worried.*"

Explain why this is a compound sentence.

Rewrite each sentence with appropriate closing punctuation and say what type of **simple sentence** it is.

- | | |
|---------------------------------------|-------------|
| a) What a nuisance you are causing! | exclamation |
| b) What are you doing on the twelfth? | question |
| c) What she did was unacceptable! | statement |
| d) He asked to see me immediately. | statement |
| e) Will you see me immediately? | question |
| f) Come to my room immediately! | command |
| g) Do you believe me? | question |
| h) Do whatever is necessary! | command |

If we think some of these are showing strong emotion, we can use exclamation marks instead.

- a **simple sentence** is made up of one **main clause**; a **main clause** makes complete sense on its own and contains a verb
- a **compound sentence** is made up of at least two **main clauses** joined by a **co-ordinating conjunction** (and, or, but)
- there are four types of **simple sentence** - a question, a statement, a command and an exclamation
- we must look carefully at sentences to decide on their sentence type and the correct punctuation

10.09.26

TBAT: write quickly and legibly, using cursive handwriting.

Write the words and
their definitions.

Use a dictionary to
help you.

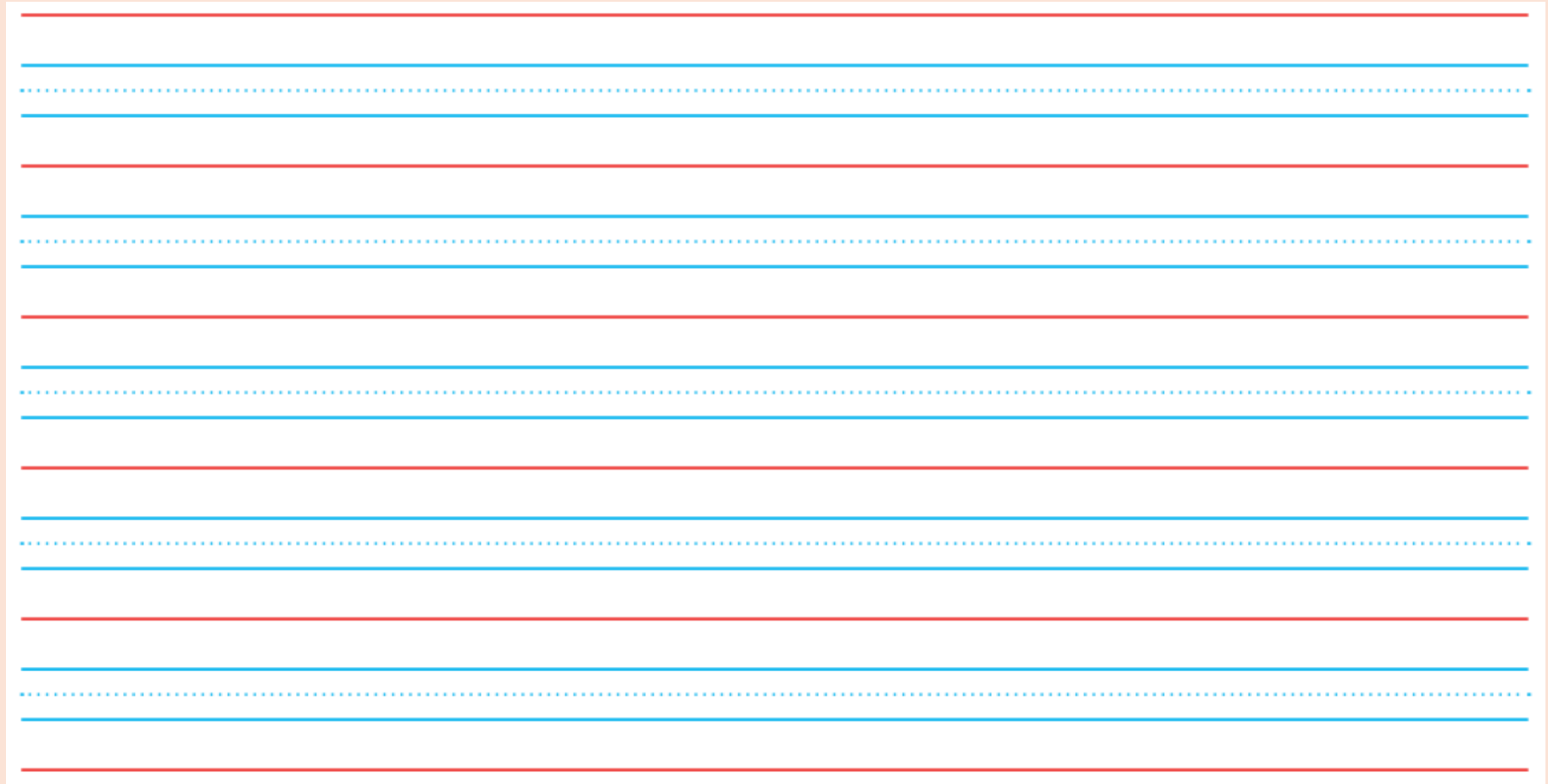
frantic

disastrous

calamitous

marvellous

spectacular

A series of five sets of handwriting practice lines. Each set consists of a solid red top line, a solid blue middle line, a dotted blue line just below the middle line, and a solid blue bottom line. These lines are provided for practicing the words and their definitions.

**Challenge – Use each word in a sentence containing
brackets.**

The main difference between watercolours and other paints is that, with oils or acrylic paints, one **opaque** colour can be painted over another opaque colour. Because watercolours are **transparent**, the whites in a watercolour painting are created by not painting over those areas of the paper.

A few things about colours to remember when using watercolours:

- Watercolours dry much lighter than the wet colour you see when you first paint on the paper.
- You can mix wet paints together in a palette or mix them directly on the paper.
- When mixing colours, you don't need to rinse your brush between picking up colours as this will add water, making the mix lighter.
- To make colours lighter, add more water.

Basic watercolour palette



Watercolour Brushes

Watercolour techniques can be difficult to master, which is why using the correct brushes might help. The bristles are made of either synthetic (humanly-constructed) hair or natural animal hair. Brushes are available in numerous shapes and sizes.

Type of brush	Use	Brushstrokes
	round brush	
	liner brush	
	flat brush	

The size of the brush also matters; for washes, you will need to use a large brush to ensure all of the paper is wet at the same time.

Watercolour Brushes

Click the
brushes to
find out more

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Type of brush	Use	Brushstrokes
 round brush	With its pointy tip and wider belly, this is an universal brush for watercolour as it can create a variety of thicknesses.	

Watercolour Brushes

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Type of brush	Use	Brushstrokes
 liner brush	Long and narrow, this brush is ideal for painting very fine lines.	

Painting Techniques

There are many techniques which can be used when painting with watercolours. Here are the two most common techniques used for painting:



Talk About It

Look at this watercolour painting by Vincent van Gogh. Where in the painting could he have used the two techniques?

‘Coalmine in the Borinage’ by Vincent van Gogh, 1879

Splatters

Because you are working with water, you can create intricate splatters which can add energy to your painting and create more texture.

Different tools will produce varying results:



Take an old toothbrush and dip it in your paint. Run your finger along the bristles to spray the paint onto your paper.

Run your fingers along the bristles of a flat brush with paint.



Dip a brush in the paint. Then use the handle of another brush to tap your brush handle. This will shake dots of paint onto the paper.

Example of a Watercolour Project



4

Shadows were added by using a mixture of black and orange wash. Some of the fur has been blended into the background. To imitate movements and texture, brush splatters have been added to the background and the fur.



Experiment with watercolour techniques.

Watercolor Techniques for kids - YouTube



Use watercolour techniques to complete your bird.

[Flying bird painting#paint with asriya Art - YouTube](#)



Thursday 10th September

TBAT: understand each position in Flag football

OFFENSE vs DEFENSE

QUARTERBACK

This player receives the snap from the center and initiates the play either through a handoff or pass. The quarterback cannot directly run with the ball across the line of scrimmage without first handing the ball off to a teammate and then receiving a second handoff back or receiving a pass.

CENTER

This player's main responsibility is to snap the ball to begin the play, a critical skill at all levels of football. Once the center has snapped the football to the QB – either directly or from a pistol or shotgun formation – they are eligible to go out for a pass and catch the ball.

WIDE RECEIVER/BACK

Any player who does not initiate the snap nor receive the snap is considered an eligible receiver/back and can either receive a handoff or catch a pass.

SAFETY

The Safety is the defensive QB, especially in flag football. Their role is to lead the defensive team and to cover anyone who get loose. If a wide receiver is getting open deep, he/she covers and helps out.

RUSHER

Any player who rushes the quarterback must be a minimum of seven yards from the line of scrimmage at the snap. For fields that do not include yard lines, officials will mark this seven-yard zone before every play.

DEFENSIVE

The defensive pass first and Opposite to (i.e. pass first) defensive back run first then

SCORING:

- Touchdown = 6 points
- One (1) point after touchdown (PAT) from the 5-yard line. Must be a passing attempt. = 1 Point
- Two (2) points after touchdown (2PAT) from the 12 yard. Can be either a running or passing attempt. = 2 Points
- If a defender intercepts a PAT or 2PAT pass and returns it to the opposition endzone. (PAT return) = 2 points.
- A safety occurs when the ball carrier is ruled down within their own endzone. A ball carrier is ruled down by being tackled, a flag falling out, stepping out of bounds or fumbling the ball.

DEFENDING:

- A legal flag pull takes place when the ball carrier is in full possession of the ball.
- Defenders can leave the floor and dive to pull the ball carriers flag but cannot impede, hold or hit the ball carrier.
- It is illegal to attempt to strip or hit the ball out of the ball carrier's possession at any time.
- Interceptions are returnable for touchdowns and for 2 points on both PAT and 2PAT attempts.
- Once the quarterback has lowered their hands (simulating a handoff) the defence are able to cross the line of scrimmage and tackle offensive players. This is the only time a quarterback can be sacked.

