YEAR 6

HOME LEARNING

Oldbury Park
PRIMARY RSA ACADEMY

Hello, Year 6!   It was great to see some of you in school last week! We know it's quite different to how school normally runs but you did a great job of sticking to some of the new rules. As we move onto this week we hope that we can start to do more outside learning as well as some Maths and English. It is important to keep up with some of the key skills but we also want you to enjoy your last few weeks at Oldbury Park. Whether you are at home or in school, we will also be doing some activities to help you feel more confident when you arrive at Christopher Whitehead's, The Chantry or Tudor Grange in September. It seems a long way away now but you have all worked extremely hard this year to make sure you are ready. This time away from you all has shown us how independent you have all become and that you are all ready to start your next adventure!

Miss Moule   Miss Hill   Julie

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EVERY DAY

Daily Maths lessons - https://whiterosemaths.com/homelearning/year-6/ (Summer term Week 8 w/c 15th June)

Watch the video and then complete the written task (some of these need printing).   This is 30-40 minutes work. This week is Algebra and Measurements There is no video for Friday but there will be a Maths Challenge which will be on the website later in the week.

Spellings from the SPAG Sheet - daily

Mathletics – 15-20 minutes (more if you wish).

Read for at least 30 minutes.

CGP BOOKS (across the whole week)

Maths – Pages 55-56 (after completing White Rose Tasks). This is for all 3 math's groups.

English – Pages 20-21

SURVIVAL OF THE FITTEST!   Additional tasks for this week (15/6/20)

English	TOPIC
Monday SPAG Sheet (colourful boxes/week 2) Reading Comprehension – Throwing a Tree poem. https://www.twinkl.co.uk/resource/t2-e-2083-year-6-reading-assessment-term-3 **Tuesday** Watch the video called Catch A Lot. https://www.literacyshedplus.com/en-gb/resource/catch-a-lot-ks2-activity-pack What do you think will happen next? Write down some ideas and then write at least 2 more paragraphs for what happens next! You could finish the story in any way you want! Remember, use adjectives and different types of sentences to make your writing even more WOW! You could build tension and suspense using some great punctuation too! **Wednesday** Use the video Catch A Lot again but this time imagine you are one of the characters who has washed up on a desolate island. You have a piece of paper, charcoal and an empty bottle, what message will you write? **Thursday** Reading Comprehension with a twist! Use your favourite book or a book that you're currently reading and choose a chapter you know best. Using that chapter, write 8 questions for your family to answer! They could be similar questions to other reading comprehensions you have completed but they must be challenging enough! Think about the VIPERS skills and how you could write questions to include these skills: Vocabulary, Infer, Predict, Explain, Retrieve and Summarise. **Friday** SPAG – expanded noun phrases. Watch the video and have a go at the activities. https://www.bbc.co.uk/bitesize/topics/zwwp8mn/articles/z3nfw6f Reading Comprehension Non-fiction pages 20-21 of CGP book.	Designing the perfect playground https://www.twinkl.co.uk/resource/t-t2-077-ks2-stem-perfect-playground-design-challenge-activity What would the perfect playground look like? What materials could be used? Will it be safe? You don't have to use the materials it suggests but think about the design of your playground and the reasons behind your ideas. Science – extreme conditions. Thinking about our topic, Survival of the fittest, how do animals survive in the most extreme conditions? Choose an extreme place on the planet - it could be the Arctic because of its freezing temperatures or it could be the Sahara Desert because of its scorching heat! Then choose an animal which lives in this place, you may need to do some research to find out what animals live there. Create a mind map or guide about this animal and include the following information: Where does this animal live? What makes the place it lives in extreme? What kind of challenges would it face? How do they survive in this place? Do they have anything special to help them? Have they adapted in any way to make sure they survive in these extreme conditions? https://www.bbc.co.uk/bitesize/topics/zvhhvcw/articles/zxg7y4j https://www.bbc.co.uk/bitesize/topics/zvhhvcw/resources/1 Transition – 2 activities. In September, you will be starting a new adventure! We have put together some helpful activities that you can complete. You should go through the PowerPoint, videos and complete the pages for Session 1 (pages 2 and 3) and Session 2 this week (pages 4, 5 and 6). The PowerPoints (with video links) and activity book can be found on the school website.

Solve two-step equations
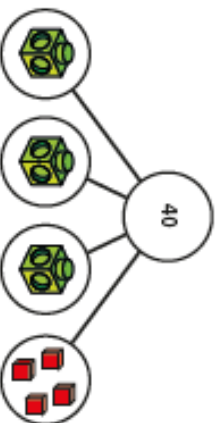
1 Here is a part-whole model.
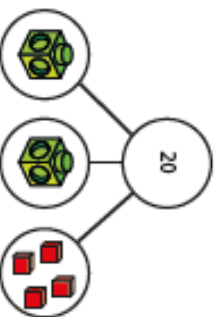
a) Write an equation for the part-whole model.

_____

b) Solve the equation to work out the value of [cube].

[cube] = ☐

2 If each multilink cube represents x, form and solve an equation to find the value x.

$x =$ ☐

3 There is the same number of counters under each cup.
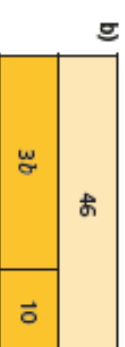There are 16 counters in total.

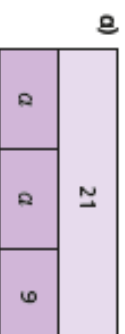a) Use y to represent the number of counters under each cup.
Write an equation in terms of y.

_____

b) Solve the equation to find the value of y.

$y =$ ☐

c) How many counters are under each cup?

☐ ☐

4 Write an algebraic equation to represent each bar model.
Find the values of a and b.

a)

21		
a	a	9

$a =$ ☐

b)

46	
$3b$	10

$b =$ ☐

5 Solve the equations.

a) $5x + 1 = 31$

$x = \boxed{}$

b) $3x - 3 = 9$

$x = \boxed{}$

c) $4p - 11 = 3$

$p = \boxed{}$

d) $9 = 2y + 8$

$y = \boxed{}$

e) $10g - 2 = 46$

$g = \boxed{}$

f) $4 + 3y = 28$

$y = \boxed{}$

6 Dani thinks of a number.
She doubles it and adds 3
She gets the answer 15

a) Write an equation to represent Dani's problem.

_____

b) Solve the equation to find her number.

7 Alex is y years old.
Her friend Brett is 3 years older.
The total of their ages is 25
How old are Alex and Brett?

Alex is $\boxed{}$ Brett is $\boxed{}$

8

£1.52   £1.20

a) Work out the cost of one banana and one orange.

One banana costs $\boxed{}$ One orange costs $\boxed{}$

b) Compare methods with a partner.

Find pairs of values (2)

1 Class 6 are trying to solve a number puzzle.

▶ + ▶ + 🔵 = 10

a)

Dexter

The triangle could be 3 and the circle could be 4.

Do you agree with Dexter? _____

Explain why.

_____

b)

The triangle is worth 4

Dora

What is the value of the circle in Dora's number puzzle?

🔵 = ▢

c) Find other pairs of values that the triangle and circle could equal.

Find three pairs.

▶ = ▢   🔵 = ▢

▶ = ▢   🔵 = ▢

▶ = ▢   🔵 = ▢

2 a and b are whole numbers.

$2a + b = 14$

Complete the table to show different possible values for a and b.

a	0	1	2	3	4	5	6	7
$2a$	0	2						
b	14							
$2a + b$	14	14	14	14				

3 c and d are both integers less than 15 but greater than zero.

$3c - d = 2$

Complete the table to show different possible values for c and d.

c	1	2	3	4	5
$3c$	3				
d	1				
$3c - d$	2	2	2		

b) Explain why there are no other possible values for c and d.

_____

4 x and y are both multiples of 5 less than 100

If $2x = y$, circle the possible values of x and y.

$x = 20, y = 10$

$x = 20, y = 20$

$y = 90, x = 45$

$x = 35, y = 70$

$x = 10, y = 20$

5 Here is a rectangle.

x and y are both integers.

The rectangle has a perimeter of 28 cm.

a) Write an equation to represent the perimeter of the rectangle.

b) List all the possible pairs of values for x and y.

_____

_____

_____

Compare answers with a partner. How do you know you have found all the possible values?

6 Aisha is buying some stationery for school.

She spends exactly £1

List the possible combinations of pencils and pens that Aisha could have bought.

pencil
10p

pen
15p

_____

_____

_____

7 Ron has four digit cards.

- Two of the cards have the same value.
- All of the cards are less than 10 but greater than zero.
- All of the cards are odd.
- The sum of the four cards is 24

Find two possible sets of cards.

Set 1

Set 2

8
$2ab = 48$

a) Find a pair of possible values for a and b.

$a = \boxed{}$ $b = \boxed{}$

b) Work with a partner to find as many pairs of values as you can.

1 How many centimetre cubes can you fit along a metre stick?

What does this tell you?

2 Complete the sentences.

a) There are ____ grams in 1 kilogram.

There are ____ kilograms in one tonne.

b) There are ____ millilitres in 1 litre.

c) There are ____ millimetres in 1 centimetre

There are ____ centimetres in 1 metre.

There are ____ metres in 1 kilometre.

3 Complete the bar models.

a)

1 km	1 km	1 km	1 km
1,000 m	1,000 m		

There are ____ m in 4 km.

b)

1 kg	1 kg	1 kg	1 kg	1 kg	1 kg	$\frac{1}{2}$ kg
1,000 g	1,000 g	1,000 g				

There are ____ g in $6\frac{1}{2}$ kg.

4 Complete the conversions.

a) 2 kg = ____ g

5 kg = ____ g

10 kg = ____ g

12kg = ____ g

b) 1 l = ____ ml

5 l = ____ ml

11 l = ____ ml

5 A bag of dog food weighs 2.5 kg.
Write this weight in grams.

6 What measurements are the arrows pointing to?
Label them on the number line.

mm 0 1   5   13   2

cm 0   1

7 Complete the conversions.

a) 10 mm = [ ] cm

11 mm = [ ] cm

[ ] mm = 11 cm

[ ] mm = 1.1 cm

[ ] mm = 10.1 cm

b) 2.1 km = [ ] m

2.01 km = [ ] m

2.001 km = [ ] m

2.011 km = [ ] m

8 Write >, < or = to complete the statements.

a) 100 m ◯ 1 km

10 m ◯ 10 cm

10.1 mm ◯ 101 cm

b) 5.1 l ◯ 5,100 ml

607 l ◯ 0.607 ml

0.05 l ◯ 5 ml

9 Dora and Amir are trying to convert 1.05 metres into millimetres.

Dora: You can multiply 1.05 by 100 to convert it into centimetres, then multiply the product by 10 to convert it into millimetres.
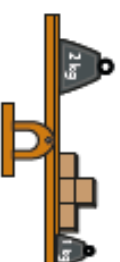
Amir: You can just multiply 1.05 by 1,000!

Who do you agree with? _____
Explain your thinking.

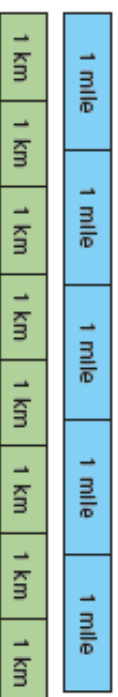**10** What is the mass of one of the boxes?
Give your answer in grams.

2 kg   1 kg

11 There are 1,000 kg in one tonne.

a) How many grams are there in one tonne?

[ ]

b) A car weighs 1.3 tonnes.
Write the weight of the car in grams.

[ ] [ ]

1 Tick the statements that are true.
Use the bar model to help you.

1 mile	1 mile	1 mile	1 mile	1 mile	1 mile

1 km	1 km	1 km	1 km	1 km	1 km	1 km	1 km	1 km	1 km

a) 5 miles is approximately equal to 8 kilometres. ☐

b) 1 mile is longer than 1 kilometre. ☐

c) 2 kilometres is longer than 1 mile. ☐

d) 2 kilometres is longer than 2 miles. ☐

2 Fill in the missing numbers on the number line.

miles

0   4   5   16   20

km

☐ ☐ ☐ ☐ ☐ ☐ ☐
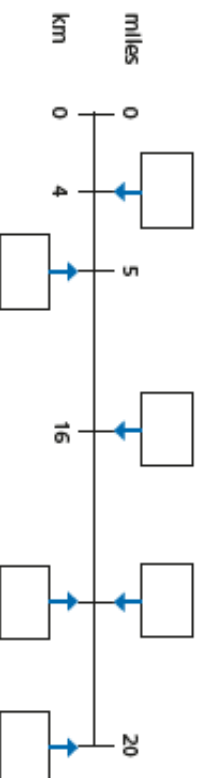
3 Complete the conversions.

a) 5 miles = ☐ kilometres
10 miles = ☐ kilometres
15 miles = ☐ kilometres

b) ☐ miles = 16 kilometres
☐ mile = 1.6 kilometres
☐ miles = 0.8 kilometres

4 Complete the conversions.

a) ☐ miles = 160 km

b) 45 miles = ☐ km

c) ☐ = 640 km

d) 95 miles = ☐ km

e) 7.5 miles = ☐ km

f) 2 miles = ☐ km

5 Here is Whitney's working out.

> If 5 miles is approximately 8 kilometres, then 10 miles is approximately 13 kilometres.

5 miles ≈ 8 km   +5
10 miles ≈ 13 km   +5

Explain Whitney's mistake.

6) A marathon is approximately 26.2 miles.

How far is this in kilometres?

7) The maximum speed limit on residential roads in the UK is 30 miles per hour.

In France, the maximum speed limit on residential roads is 50 kilometres per hour.

a) Which country has the higher speed limit for these roads?

_____

b) What is the difference between the speed limits in miles per hour?

8) Esther cycles 70 miles over 4 days.

On day 1 she cycles 14 miles.

On day 2 she cycles 32 km.

On day 4 she cycles twice as far as she does on day 3

How far does she cycle on day 4?

Give units with your answer.

9) Use a map of your local area.

Find something that is approximately:

a) 1 mile away from your school

_____

b) 1 km away from your school

_____

c) 5 miles away from your school

_____

d) 5 km away from your school

_____

Compare answers with a partner.

SPaG Weekly Practice – Week 2

Complete two questions each day of the week and learn the ten spellings. Ask someone at home to test you at the end of the week.

Write a sentence using the word 'drive' as a noun.

_____

_____

What kind of phrase is underlined in this sentence?

After the football match, we all celebrated.

a or an?

_____ umbrella

_____ delicious apple

Underline the subject in this sentence.

Incredibly, the missing ring was found by a dog.

Add a suitable co-ordinating conjunction to the sentence below.

I love apples _____ I do not like apple pies.

Circle the three determiners in this sentence.

My gran said we could make some biscuits for the fete.

Look at the sentence below and add two modal verbs:

At the adventure playground, we _____ go down the curved slide and we _____ try out the rickety rope bridge.

Spellings

1. category
2. hindrance
3. recognise
4. system
5. programme
6. language
7. bruise
8. aggressive
9. develop
10. twelfth

Change these nouns/adjectives into verbs by adding the suffixes -ise, -ify, -ate or -en.

design ⟶ _____

final ⟶ _____

strength ⟶ _____

Can you think of a more formal synonym to replace this adjective?

miserable

Insert a semicolon in the correct place in the sentence below.

Many historians believe that there are more hidden tombs in the Gobi Desert they are beginning a new dig next week.

STEM Challenge: Perfect Playground Design

An Activity Linked to Unicef's Playground Challenge

Article 31 of UN Convention on the Rights of the Child states that **all children have the right to play**. By doing your Playground Challenge for Unicef, you will be helping their work to support children around the world access all of their rights.

Did you know, not all children have safe places to play? If you could design the perfect playground for children anywhere in the world, what would it look like?

You will need:

- Playdough or modelling clay
- Art straws (or normal ones)
- Cocktail sticks
- Paper, card
- Foil (optional)
- Tape, glue
- Scissors

What to do:

1. Take a good look around your playground or school field.

2. Discuss and make a list of the features of a 'perfect' playground. What should it look like? What should it have?

3. In teams, draw a plan of what would feature in your perfect playground. You could draw the equipment or markings you would like or search for images on the Internet and stick them on to your plan.

4. Now for the fun part! Select your tools and equipment and work together to build a model of your perfect playground.

5. You may decide to work in pairs or groups to complete the different parts of the design. You could make a list of things that need making and work individually to complete them. Just remember, work together to create your finished model.

Key Questions:

What do children enjoy playing at a playground?

Do you need a lot of small items or fewer, larger pieces of equipment?

How will you construct each part of your playground?

Should you include quiet spaces?

What age groups will your design be for?

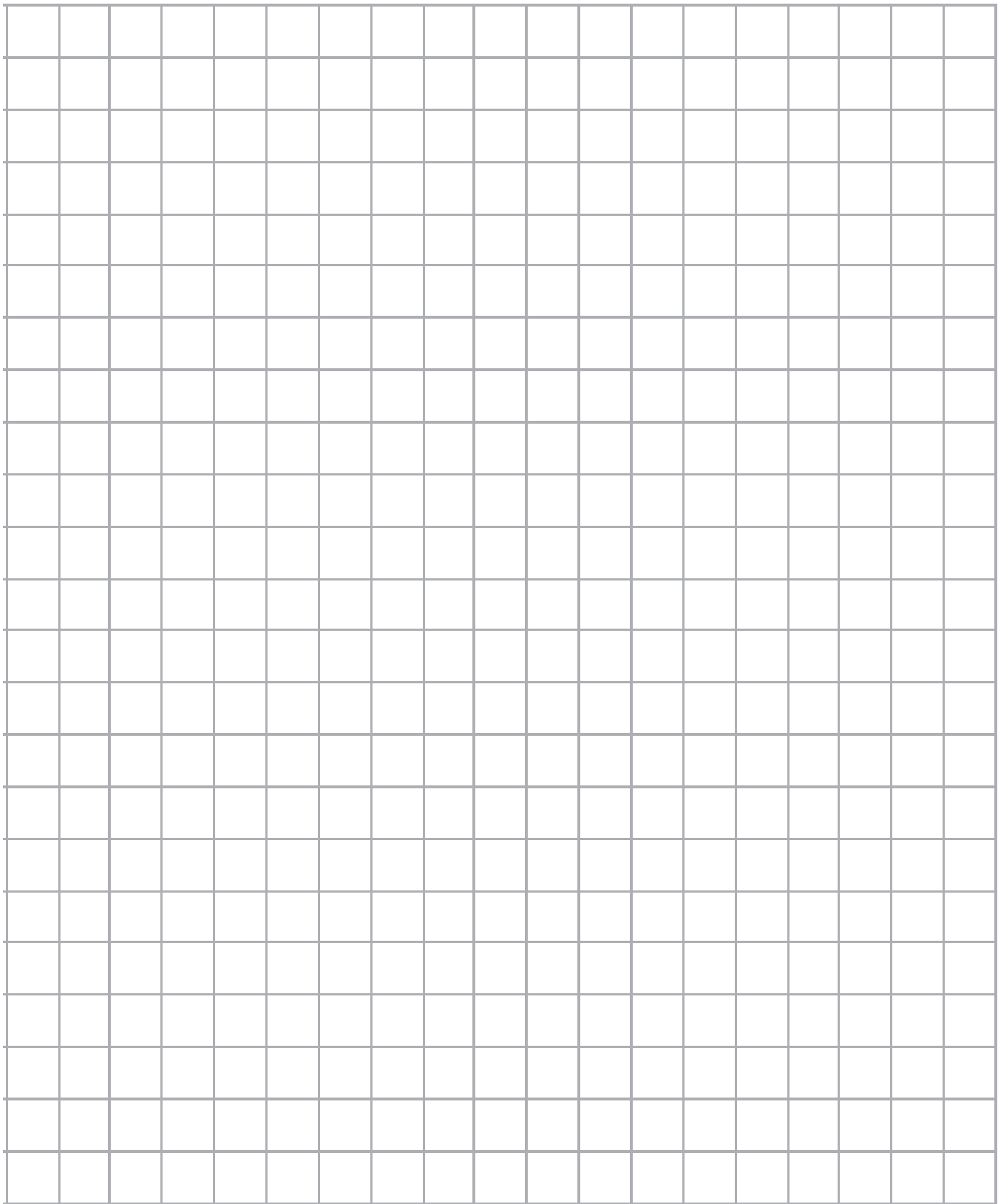How will you strengthen each structure?

Have you considered all abilities?

Is size important?

What is the best material to use?

Perfect Playground Design Sheet

Throwing a Tree

The two executioners stalk along over the knolls,

Bearing two axes with heavy heads shining and wide,

And a long limp two-handled saw toothed for cutting great boles,

And so they approach the proud tree that bears the death-mark on its side.

Jackets doffed they swing axes and chop away just above ground,

And the chips fly about and lie white on the moss and fallen leaves;

Till a broad deep gash in the bark is hewn all the way round,

And one of them tries to hook upward a rope, which at last he achieves.

The saw then begins, till the top of the tall giant shivers:

The shivers are seen to grow greater with each cut than before:

They edge out the saw, tug the rope; but the tree only quivers,

And kneeling and sawing again, they step back to try pulling once more.

Then, lastly, the living mast sways, further sways: with a shout

Job and Ike rush aside. Readied the end of its long staying powers

The tree crashes downward: it shakes all its neighbours throughout,

And two hundred years' steady growth has been ended in less than two hours.

-Thomas Hardy

13. What does the word 'stalk' mean and what does it suggest about the tree fellers?

_____

14. Circle the word that is closest in meaning to 'doffed'.

chopped   tied   removed   swing

15. What evidence is there in the poem that chopping the tree is a difficult task?

_____

_____

16. Order these events from the poem. The first one has been done for you.

An axe is used to chop a broad gash all around the trunk.	
The saw is used along with the rope until the tree comes down.	
The tree is marked in advance ready for cutting.	1
A rope is hooked upward.	

17. Write the correct tools to match the descriptions in this table.

Tool	Description
	Heavy head shining and wide
	Long limp two-handled

18. How long had the tree been growing for?

_____

- -

19. How does the poet try to make the reader feel sorry for the tree? Refer to the text to support your answer.

_____

_____

_____

_____

_____

- -

20. What are the names given to the tree fellers?

_____

21. Which of these sentences best summarises the poet's feelings about the tree being chopped down? Tick **one**.

The poet is celebrating and happy about the event. ☐

The poet is glad the tree was chopped down because it was too old. ☐

The poet seems sorrowful and disappointed that it has happened. ☐

The poet doesn't really mind whether the tree is cut down or not. ☐

22. Which of these words or phrases are used to describe the tree? Tick **three**.

Living mast	☐	Heavy head	☐
Long and limp	☐	Proud	☐
Broad and deep	☐	Tall giant	☐

23. What is meant by the phrase 'it shakes all its neighbours'?

_____

_____

24. How long did the whole process take to chop down the tree?

_____

Catch A Lot

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Message in a Bottle

Imagine you are one of the characters from the clip. After the whale tries to eat you, you find yourself washed up on a strange island. Write a message to put into a bottle to explain how you got there.
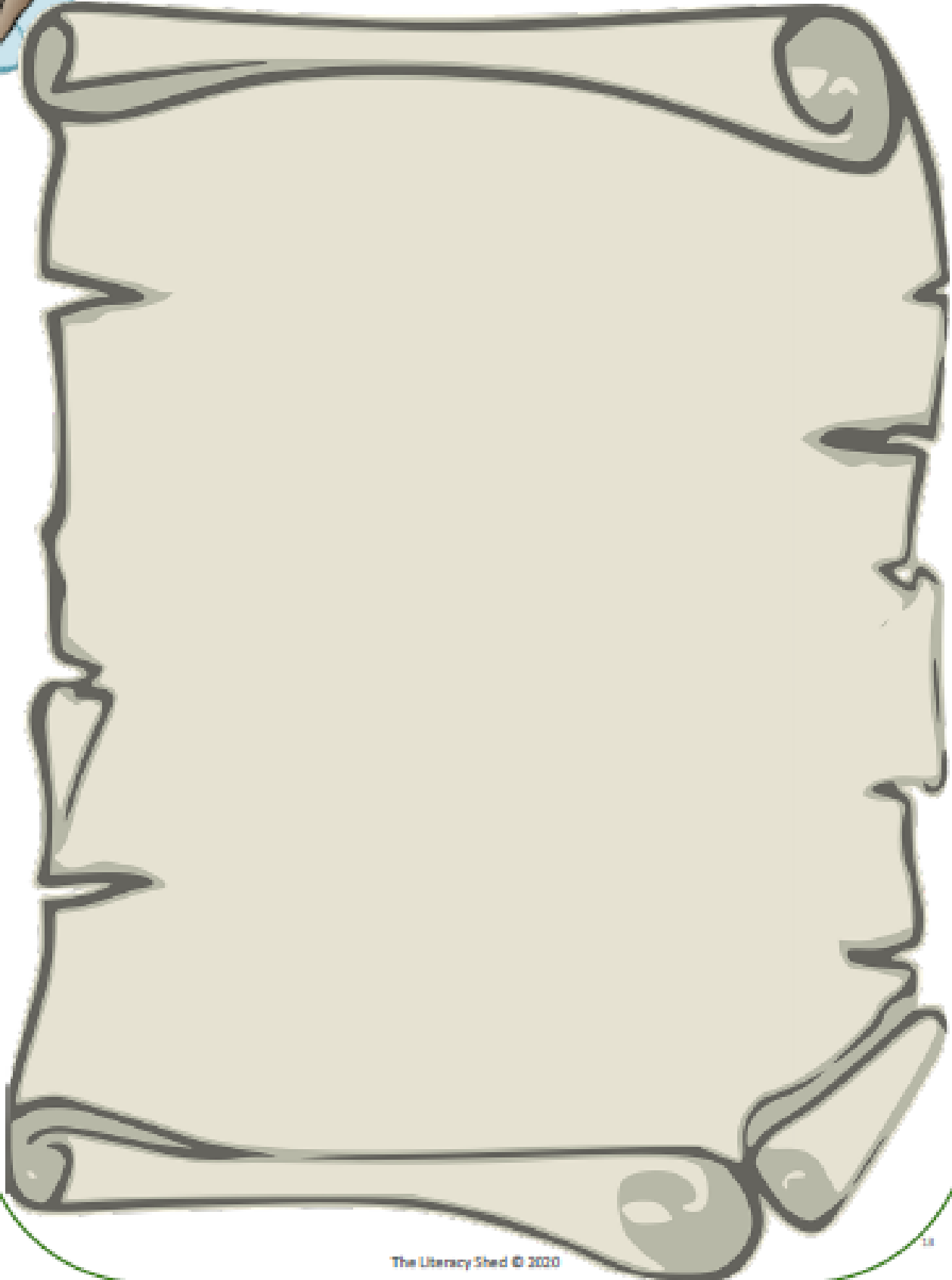
Session 1
Being awesome

TASK: Is there anything holding you back?

Worried you can't do things

Feeling embarrassed

You find it hard to focus

Scared of hard work

Feeling stressed or anxious

Fear of looking foolish

Scared of taking risks

TASK: Write down what you can learn from your primary school experience ahead of going to secondary school.

- How did you handle things when they went wrong?

- How did you react when you got stuck?

- Think about a time when you showed a 'kid awesome' attitude. Write about it here:

- Write down the kind of person you want to be at secondary school.
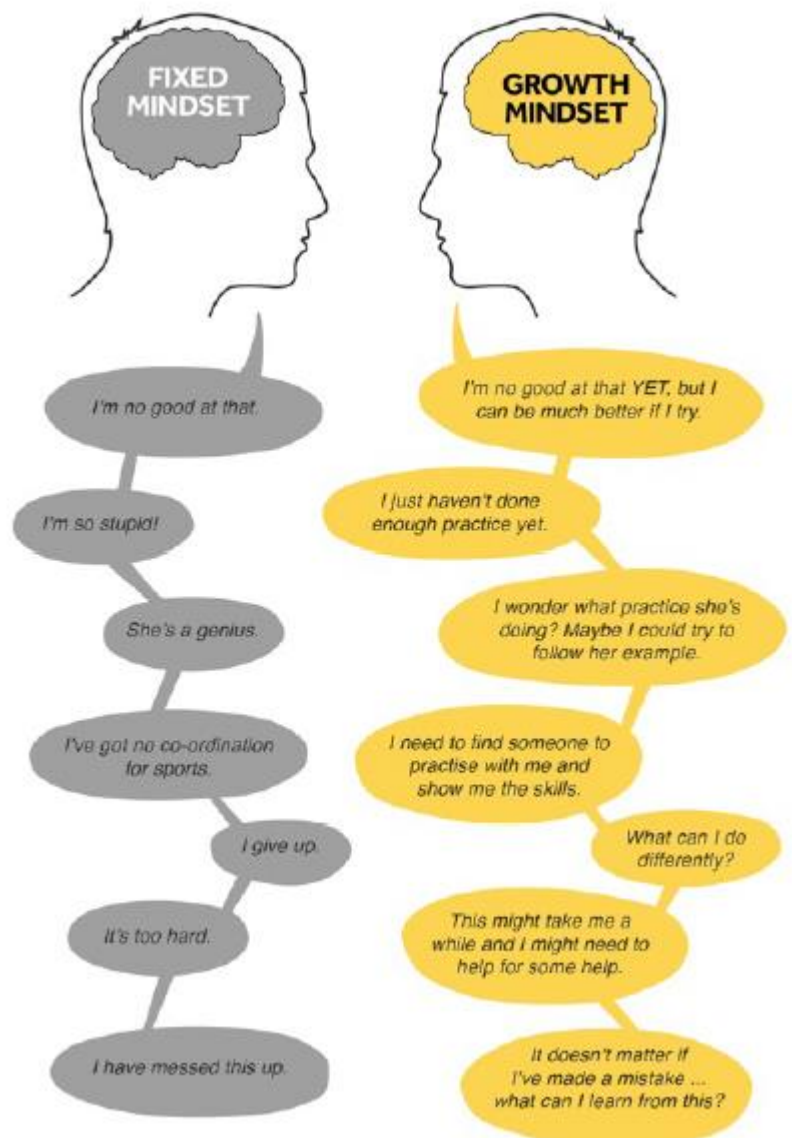
Session 2
Unlocking your mind

TASK:

- Look at these two people, each with a different mindset.

- Which mindset are you and why?

- Does it change depending on different situations in your life?

- Are you someone who thinks that you are just born intelligent?

FIXED MINDSET

I'm no good at that.

I'm so stupid!

She's a genius.

I've got no co-ordination for sports.

I give up.

It's too hard.

I have messed this up.

GROWTH MINDSET

I'm no good at that YET, but I can be much better if I try.

I just haven't done enough practice yet.

I wonder what practice she's doing? Maybe I could try to follow her example.

I need to find someone to practise with me and show me the skills.

What can I do differently?

This might take me a while and I might need to help for some help.

It doesn't matter if I've made a mistake ... what can I learn from this?

The Worry Jar

- What are the things you tend to worry about which might stop you from trying something new or hard?
- Write them down on strips of paper (or you can write them down in your booklet).
- Put those strips of paper in a worry jar – any jam jar or a pot will do.
- In a week's time, look at the strips of paper again (maybe with a parent or sibling) and see if the worries still apply.
- Throw away the ones that don't.
- Take a look at the ones that are still worrying you. Is there someone you can talk to about these?

Use this time before Year 7 to have a go at things.

TASK:

- Identify three things that you say you 'can't do'. Write them down.

1.

2.

3.

- Now write each thing down using a growth mindset approach. For example, 'I can't do maths' turns into, 'I am going to practise the things in maths that I can't do yet'.

1.

2.

3.

- Think of something you've always wanted to get better at. Write it down. How could you practise that thing now?