Teach Active

Maths & English

Home Learning Packs

Year 4

Home Learning Packs - Year 4

The team at Teach Active have selected 10 activities each for Maths and English for children who are having to stay at home and isolate instead of being in school. They have been chosen to encourage independence, increase confidence and develop fluency in the key skills of number, reading and writing. Some are deliberately active games and others are designed for sitting down and recording responses. The key objectives that the activities meet are:

- Count in multiples of 6, 7, 9, 25 and 1000
- Round any number to the nearest 10, 100 or 1000.
- Recognise the place value of each digit in a 4-digit number (thousands, hundreds, tens, ones)
- Count backwards through zero to include negative numbers
- Solve problems, including the use of addition, subtraction, doubling and halving
- Add and subtract money
- Know, use and recall all tables facts to 12 x 12
- Explain key facts
- Retrieve information
- Find the meaning of words in context
- Know how to spell the Y3/4 word list
- Legibility, consistency and quality of handwriting
- Discuss and record ideas

Available Activities

Maths Activites

1. Multiple Steps to Success
2. If This Is The Answer
3. Fitness Tables
4. Negative Shuttling
5. Solve It
6. Rounders
7. The Value of Dice
8. Pasta Count
9. Shopping Problems
10. Making Money

English Activites

1. Deforestation - Reading
2. Reading - Comprehension
3. Persuasion - Poster Design
4. Poetry - It's a rap!
5. Researching Facts: Geography
6. Writing - A Letter to the Prime Minister
7. Discussion
8. Glossary
9. Acrostic Poem
10. Spelling Practice

'Fun Activities to do at Home' worksheet included

Maths Plans

See and Share #TeachActive in Action!

Multiple Steps to Success

Objective: Count in multiples of 6, 7, 9, 25 and 1000.

Starter Activity

Practice your times tables – write, count and march around in 4s to 80 and back down to zero

Game Instructions

1. You need some space at home or outside to march, step, hop and jump around in. Even a small indoor space can be used to count around, moving in wiggly lines, around the table or down the stairs (be careful!). You could even make up a 'funny trail', leading round the garden or through the house, for example! Make these numbercards: 6, 7, 9, 25 and 1000

2. Pick a random number card – this is what you must count in, 6s (to 72), 7s (to 84), 9s (to 108), 25s (to 300) or 1000s (to 10,000)

3. March, hop or jump around your chosen route, remembering to count out loud so people can hear you. Put some music on if you like!, Too tricky? Try the 3 and 4 times tables instead!, Try all four numbers – and then test yourself by doing each one at random, but counting and moving quicker this time!

Challenge

Can you walk forwards but count backwards? In 6s from 72, 7s from 84, 9s from 108, 25s from 300, and 1000s from 10,000?

Extra Activity
Have a go at making up your own game to meet this objective, and then teach someone at home to play it with you.

If This Is The Answer

Objective: Write mathematical statements and their inverse partner statements.

Starter Activity

Practice your times tables – write, count and march around in 6s to 72 and back down to zero

Game Instructions

1. Make a set of 0-9 number cards. Spread them out face down on the floor
2. Run and turn one card over. Do this many jumping jacks. ,Move onto another card and repeat
3. Use the two cards you have turned over to make a 2-digit number, e.g. turning over a 3 and a 5 could be put together to make 35 (or 53)
4. Write down two number sentences that give your number as the answer but are inverse to each other. So, if your number was 53, you might write 33 + 20 = 53, and 53 – 33 = 20, for example
5. Repeat until all 10 cards have been used.

Challenge

Can you think of five ways to make each target number with missing number questions?
And can you include at least one pair of x/÷ statements?

Extra Activity
Have a go at making up your own game to meet this objective, and then teach someone at home to play it with you.

Fitness Tables

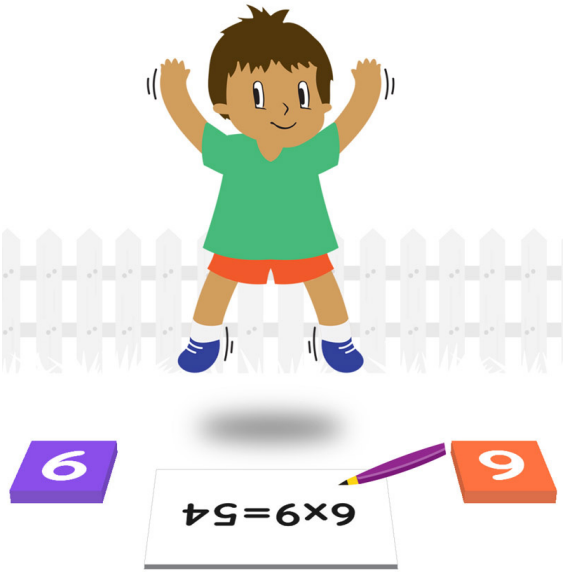
Objective: Recall multiplication facts up to 12 x 12.

Starter Activity

Practice your times tables – write, count and march around in 8s to 96 and back down to zero

Game Instructions

1. Make two sets of 1-9 cards, placed separately, mixed up and face down. your child isn't ready for their 6, 7 or 9 times tables, use 3, 4 and 8 instead
2. Pick a card at random from each group, which could be 6 and 9, for example. This is your multiplication question
3. Do 6 star jumps and 9 shuttle runs (or whatever numbers are on the cards)
4. Calculate and write down the number sentence for your multiplication question (e.g. 6 x 9 = 54)
5. Try again using new cards, and different exercises. Continue repeating the maths and physical activities for 25 minutes.



Challenge

Ask someone to test your tables knowledge and speed of recall by picking two cards randomly for you several times.

Extra Activity
Have a go at making up your own game to meet this objective, and then teach someone at home to play it with you.

Negative Shuttling

Objective: Count backwards through zero to include negative numbers.

Starter Activity

Practice your times tables – write, count and march around in 7s to 84

Game Instructions

1. Make a number line of stepping stones, or similar, to jump along from -10 to 10 (including zero)
2. Use a pack of playing cards. Picture cards are worth 10, and an ace is worth 1
3. Turn over a card. Starting at zero, jump/step/hop backwards that many steps/stones (for example 7)
4. Turn over another card and jump/step/hop forward that many places, for example 10. Where have you ended up?,Note down what you have just done: -7 +10 = 3,How many goes can you have, and how many number sentences can you create, in 15 minutes?

Challenge

Ignore the stepping stones/cards.
Pick 5 playing cards and subtract them in the order you picked them.
For example, Motty turned over a 5, 10, 6, ace and jack, so his subtraction sentence would look like this:
5 -10 = -5 – 6 = -11 – 1 = -12 -10 = -22.
Now you need to choose an exercise to do that many times!

Extra Activity
Have a go at making up your own game to meet this objective, and then teach someone at home to play it with you.

Solve It

Objective: Solve problems using addition, subtraction, doubling and halving.

Starter Activity

Counting practice - write, count and march around in 1000s to 10000 and back down to zero

Game Instructions

1. Make a set of 0-9 cards and make a low 3-digit number, e.g. 275
2. Add the digits together, e.g. 2 + 7 + 5 = 14
3. Now complete that many step ups
4. Now pick another two cards and make a new 2-digit number, e.g. 36
5. Add those digits together (e.g. 3 + 6 = 9) and do that many star jumps
6. Add the 3-digit number and 2-digit number together (so 275 + 36 = 311)
7. Subtract the 2-digit number from the 3-digit number (275 – 36 = 239).

Challenge

Can you double each number? Can you double the total?
Can you halve either number?
Can you find half of the subtracted answer?
Is either number divisible by 3, 4, 5,6 or 10?

Extra Activity
Have a go at making up your own game to meet this objective, and then teach someone at home to play it with you.

Rounders

Objective: Round any number to the nearest 10, 100 or 1000.

Starter Activity

Counting practice - write, count and march around in 9s to 108.

Game Instructions

1. Collect about 10 tins or packets from the kitchen cupboard, asking an adult to help.
2. Pick one item and find its weight on the packaging.
3. Note this down and repeat for all ten items
4. Rewrite all ten items in weight order from lightest to heaviest.

Challenge

Can you repeat the task and beat your time?

Extra Activity
Have a go at making up your own game to meet this objective, and then teach someone at home to play it with you.

The Value of Dice

Objective: Recognise the place value of each digit in a 4-digit number (thousands, hundreds, tens, ones)

Starter Activity

Counting practice – write and count on in 1000s from any random 3-digit number.

Game Instructions

1. You need one or more dice and a thousands, hundreds, tens and ones column chart.
   You also need a selection of bricks, dried pasta or pebbles or similar
2. Roll the dice so you have four numbers in all. Let's say you roll a 1, 4, another 1 and a 3
3. Use the numbers to make a 4-digit numbers (such as 1134)
4. Put the correct number of items in each column to represent each digit in the number.
   Note the value of each digit in each column
5. Repeat 5 times, keeping a record of your numbers and the value of each digit
6. Play with a friend. On the same roll of dice what number can you make?
   Who can make the highest number? Smallest number?

Challenge

Ask someone to think of a number between 1001 and 9999.
Tell them as quickly as you can how many thousands, hundreds, tens and ones are in their number.

Extra Activity
Have a go at making up your own game to meet this objective, and then teach someone at home to play it with you.

Pasta Count

Objective: Count in multiples of 6, 7 and 9.

Starter Activity

Counting practice – write and count on in 6s from any random 2-digit number.

Game Instructions

1. Get a small or opened bag of dried pasta and estimate how many pieces are in the bag
2. Count six pieces of pasta at a time into a container
3. Continue until all the pasta pieces have been counted
4. What is 19 more and 19 less than the total number of pasta pieces?

Challenge

Repeat the game but take seven pieces of pasta each time – you should be a lot quicker this time – and finally try one more time but take nine pasta pieces each time!

Extra Activity
Have a go at making up your own game to meet this objective, and then teach someone at home to play it with you.

Shopping Problems

Objective: Solve problems.

Starter Activity

Counting practice – write and count on in 9s from any random 2-digit number.

Game Instructions

1. You need a till receipt from a supermarket trip
2. Round the first half of the items to the nearest 10p
3. Round the second half of the items to the nearest pound
4. Order the items by their original prices, from highest to lowest

Challenge

Now multiply the highest priced item on the receipt by 2, the next highest priced item by 3, the third one by 4 and so on, until you have used all the items or got up to 10 x the price.

Extra Activity
Have a go at making up your own game to meet this objective, and then teach someone at home to play it with you.

Making Money

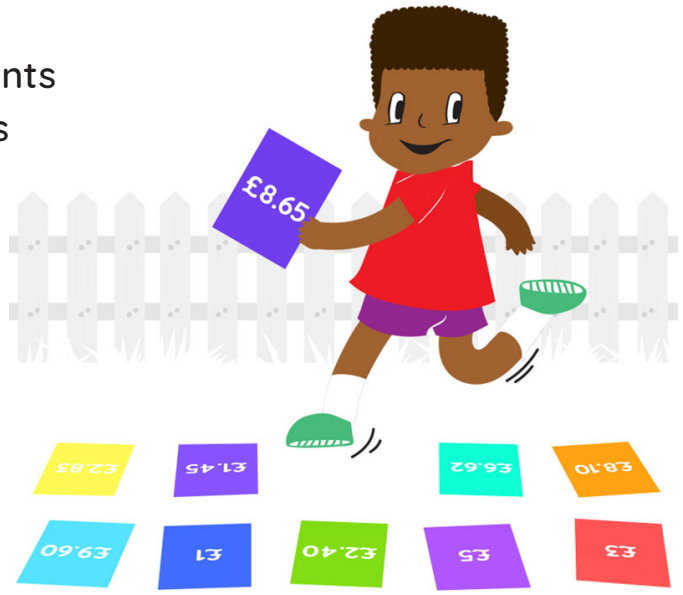
Objective: Add and subtract money.

Starter Activity

Practice your times tables – write, count and march around in 7s to 84 (again).

Game Instructions

1. Use the money amount cards or make 10 cards showing different amounts under £10.00 (such as £8.65, £2.49 etc). ,Put the cards in different places around the room or garden
2. Collect one card at a time and change the amount into pence (£8.65 = 865p, for example)
3. Repeat, and add the two amounts together. How quickly can you collect all the cards and do all the calculations?



Challenge

Can you calculate the change from £10.00 for each amount?
Do it in pence first

Extra Activity
Have a go at making up your own game to meet this objective, and then teach someone at home to play it with you.

English Plans

See and Share #TeachActive in Action!

Deforestation - Reading

Read the information. How does it make you feel? Write down any questions you have about deforestation, and any vocabulary you don't understand. See if you can find the answers to your questions using the internet, and the meanings of words from a dictionary.

Reading - Comprehension

Read the Deforestation page again and then answer the following questions:

1. Describe what deforestation is in your own words.
2. Give three reasons why deforestation occurs.
3. Why are trees and rainforests so important?
4. Write how much rainforest is destroyed every second and explain why deforestation contributes to global warming.
5. What does the author fear will happen to some wildlife species? Explain why this may happen.
6. Now read the Orangutan information page and answer the four questions there.
7. Find out and describe what a conservationist does.

You will need
The Deforestation info page and The Orangutan info page found on the next two pages.

Deforestation

What is deforestation?

Deforestation is when large amounts of trees are chopped or burnt down to make space for something else. Clearing the forest in this way destroys the places that plants and animals need to live.

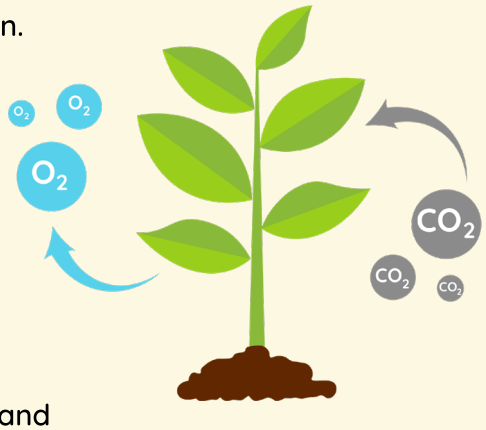
Why does deforestation happen?

Deforestation happens all over the world for many different reasons. Forests may be cleared so that new homes can be built for people. The land may also be used by farmers for animals like cows, pigs and sheep. A further reason is that wood from trees is used to make products like furniture and paper that everyone uses.

Places like farms and paper mills mean that there are jobs for people to make money. However, many people are worried that deforestation is happening too quickly in the world and that this will damage our environment.

Why are trees important?

Trees are very important because they produce oxygen. This is the gas that we all need to breathe. When we breathe in, we take in oxygen and breathe out a gas called carbon dioxide. Trees take in that carbon dioxide and turn it back into oxygen.



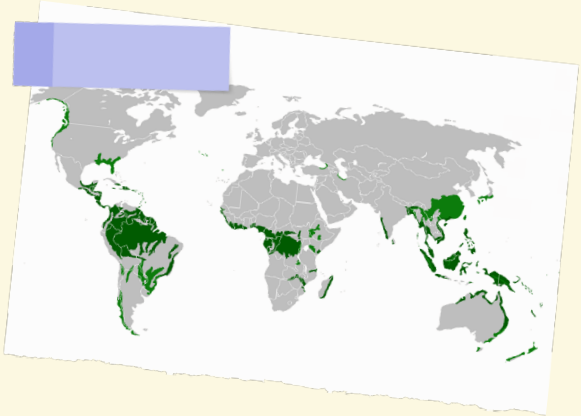
When lots of trees are cut down, there is more carbon dioxide in the environment. Too much carbon dioxide has been found to cause **global warming**.

Tropical Rainforests

Tropical rainforests are found near the equator in hot and wet places. More than half of the world's plants and animals can be found in rainforests.

Every second, an area the size of a football pitch is burnt or chopped down in the rainforest.

Deforestation means that animals and wildlife are losing their habitats. Some animals such as the Bornean Orangutan are becoming endangered. They may even become extinct.



Bornean Orangutan

Where do they live?

They live in the Tropical Rainforest of Borneo, Southern Asia.

Why are they endangered?

Deforestation is the main threat to Bornean Orangutans. People are destroying trees in the rainforest so that they can grow a different type of tree called African oil palms. Forests are burned so that the rainforest trees are destroyed quickly, making a cleared area for the oil palms to be planted. Palm oil is made from the fruits of the African oil palm tree.

Did you know that orangutans share 97% of human DNA?

Why don't people just stop making palm oil?

Palm oil is used in many of the products that we all use every day and is in great demand. Because it is so popular, more and more of the rainforest is destroyed to make palm oil farms and plantations. People who grow the palm oil crop sell the palm oil to make money. With the money, they can afford homes and food for their families.

What is palm oil used for?

Palm oil is a type of vegetable oil and it is used in lots of products. It is found in foods like bread, instant noodles, pizza dough, cakes, chocolates and biscuits. It is also found in items like shampoo, toothpaste and soap. It is the cheapest and most used vegetable oil in the world.

Did you know that about half of the items in your shopping trolley will contain palm oil?

What can be done to stop the Bornean Orangutan and other animals from becoming extinct?

Conservationists across the world are working with the owners of palm oil plantations and governments to work towards the production of sustainable palm oil. Sustainable palm oil means that it has been made without causing deforestation or harm to wildlife. By people working together to solve the problem, it is hoped that the precious habitat of the rainforest will be protected for the future.

What do you think?

Do you think that deforestation is needed?

What would happen to people's jobs?

What could be done to protect rainforests?

Is it important to protect the rainforests?

Persuasion - Poster Design

Design a poster that will encourage everyone to reduce the amount of non-sustainable palm oil products they buy. We need to know why this is important!

Poetry - It's a rap!

Make up a rhyming rap about the palm oil problem – or celebrating the wonders of our rainforests.

- Start by noting down the key words you want to include, and the key facts.

- What message do you want to give your audience? You want to persuade them to reduce their palm oil use. Why do they need to do this?

- Make up a beat and rhythm – think of We Will Rock You as a starting point. Use that beat, or develop your own, which repeats over and over.

- Write 2 lines which rhyme and fit over the rhythm and build it up from there! Speak the lines, like poetry, with rhythm and expression.

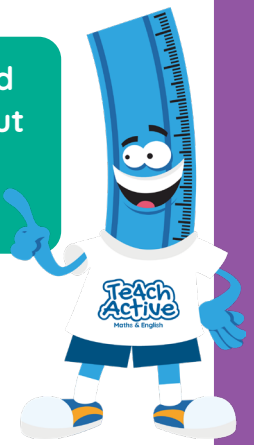
- Finally practice, and then perform your Palm Oil/Rainforest Rap to someone else!

Do you need an instrument to help keep the rhythm? If you don't have anything, make something - Improvise with a stick or pencil and an empty container or can, for example.

Researching Facts: Geography

Use an atlas or an online mapping app such as Google Earth to locate 10 countries with rainforests. Can you label them on a world map? Colour where all the rainforests are.

Choose one country and find out 10 interesting facts about that place, presented as an attractive-looking factfile.



Writing - A Letter to the Prime Minister

Write a letter to the Prime Minister explaining what laws they should make in order to reduce the amount of palm oil produced. Tell them why this is so important, and include emotive and persuasive language.

Motty's Top Tips for persuasive writing

- First explain why you are writing
- Give three reasons why things need to change
- Finish by asking for a response, such as 'Will you help?'
- Use facts and data to prove your point – asking 'Did you know that....?'
- Write in the present tense
- Ask the reader questions like 'How would you like it if....'
- Use a formal voice
- Use 'Firstly', 'Furthermore' or 'Added to this' to start your sentences and to connect your ideas
- Use 'because' to explain why

<u>Important Note!</u>
You will need The Deforestation info page and The Orangutan info page found within this booklet.

Discussion

Imagine an alien has arrived at your home and they have never seen a rainforest before.
Imagine a toy or teddy is the alien and that they have said to you: “What is this place?”

- Tell them what rainforests are

- Explain where they are

- Describe how important and beautiful they are

- Explain the problems facing the rainforests and wildlife that lives there – including people

- Tell them what we are hoping to do to reduce our use of palm oil and other products that forests are removed for

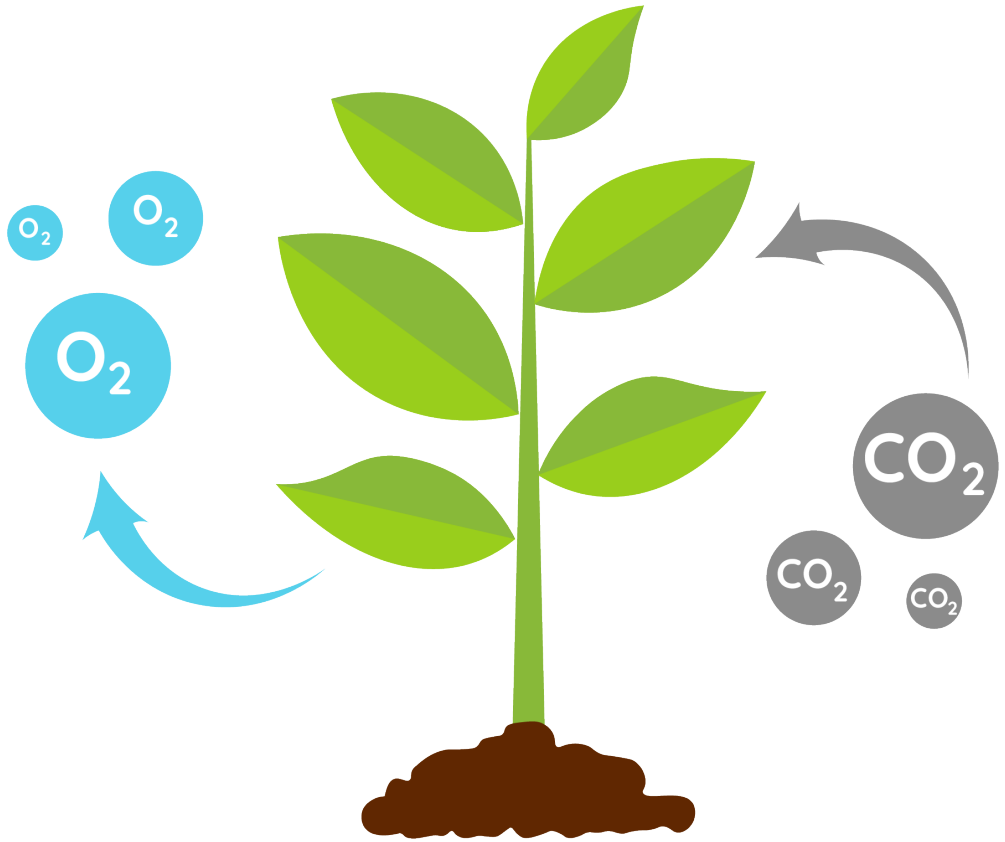
Imagine it as a conversation, where they keep asking questions. Write down the questions the ‘alien’ has asked and practice explaining it all to them.

Important Note!
You will need The Deforestation info page and The Orangutan info page found within this booklet.

Glossary

Find out and write down what these words mean:

- Carbon dioxide
- Conservation
- Ecosystem
- Endangered
- Environment
- Equator
- Extinct
- Global warming
- Habitat
- Oxygen
- Species
- Sustainable



Important Note!
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Acrostic Poem

Make up an acrostic poem about plastic, where each line begins with the next letter of the word:

R _____

A _____

I _____

N _____

F _____

O _____

R _____

E _____

S _____

T _____

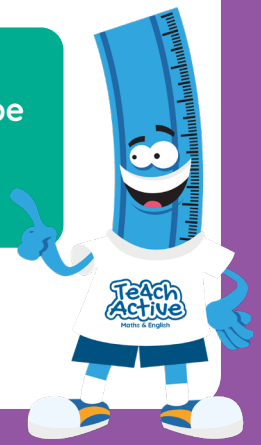
Important Note!
You will need The Deforestation info page and The Orangutan info page found within this booklet.

Spelling Practice

Write out 20 of the words onto post-its. Another handwriting and correctly-copying opportunity! Stick them all around the house, inside cupboard doors, on the back of doors etc. Every time you see one, read it, turn away and spell it out loud.

As the days go by remove the easy ones, the ones you can spell easily, and add more from the list. Leave the harder ones up to practice whenever you see them.

You will need
The Word List can be found on the next page.



Word List

accident(ally)	disappear	interest	probably
actual(ly)	early	island	promise
address	earth	knowledge	purpose
answer	eight/eighth	learn	quarter
appear	enough	lenght	question
arrive	exercise	library	recent
believe	experience	material	regular
bicycle	experiment	medicine	reign
breath	extreme	mention	remember
breathe	famous	minute	sentence
build	favourite	natural	separate
busy/business	February	naughty	special
calendar	forward(s)	notice	straight
caught	fruit	occasion(ally)	strange
centre	grammar	often	strength
century	group	opposite	suppose
certain	guard	ordinary	surprise
circle	guide	particular	therefore
complete	heard	peculiar	though/although
consider	heart	perhaps	thought
continue	height	postion	through
decide	history	possess(ion)	various
describe	imagine	possible	weight
different	increase	potatoes	woman/women
difficult	important	pressure	

Handwriting Practice - A Few Ideas From Motty

1. Practice five of the trickiest spellings on the word list by writing them out in your best handwriting.
2. Exercise the fingers on your writing hand by playing with a lump of blutac or plasticine – keep squishing it and turning it, with your thumb and first two fingers. Try it while you're watching something on TV or a tablet.
3. Practice writing your name in the air with big hand strokes, as if you are writing onto an invisible whiteboard.
4. Make up some continuous patterns using a pencil and paper. They need to include curves or straight lines, perhaps like this:  or 
5. Try copying the name from a cereal packet, drinks can or a tin from the cupboard (ask a parent first to help you find one). Write it in your neatest handwriting – then try copying the style it is actually written in.

Fun activities to do at home

- [ ] Write and record a blog about a computer game, app or you tube channel you really enjoy – what makes it so good?
- [ ] Make up and present a weather report
- [ ] Help prepare the dinner
- [ ] Bake some cupcakes
- [ ] Use an atlas or google earth to see what a place you'd like to visit looks like, and note 5 geographical facts about where it is and what it's like there
- [ ] Draw and label a map of an imaginary island: it could be where adventures could happen, or the dream holiday destination; it could be in space, or your perfect hideaway. The more detail the better. Remember to give your island a name and explain where it is.
- [ ] Research an aspect of your class topic this term and have it ready to present to your class when you are back in school
- [ ] Practice a musical instrument, singing, or dancing for 20 minutes every day
- [ ] How many books can you read in two weeks?
- [ ] Help keep the house clean and tidy every day
- [ ] Plant and look after some flowers or vegetables
- [ ] Help look after your pet if you have one
- [ ] Sit still, watch out for and note down all the wildlife you see through the window for 10 minutes every day – keep a nature log or diary
- [ ] Keep a diary for the two weeks you have to stay at home, recording what you did each day, and how you felt – it could be a video diary, or written down