

GEOGRAPHY IDEAS FOR SUMMER HOLIDAYS 2020

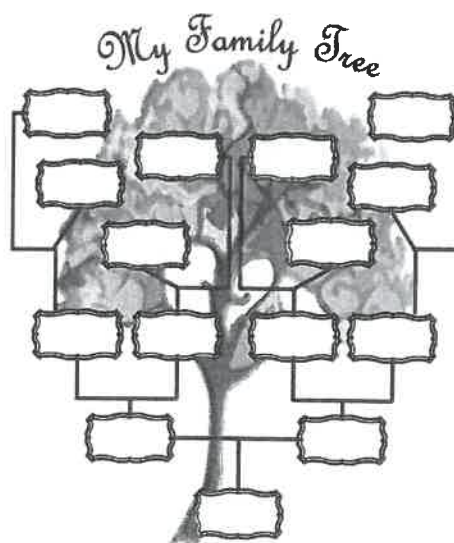


1. **Create a scrapbook** of places you visit over the holidays - don't forget these can be local too. You could include photos, postcards, leaflets, maps, stickers, tickets, your own pictures and writing etc.
2. **Round the world alphabetically.** Name a country, starting with A, then B, then C etc. If you get stuck, look through an atlas and discover a new part of the world! Make the game more challenging by doing the same for capital cities and famous landmarks, famous rivers, volcanoes, mountains seas and so on.
3. **Design your own country.** Give it a name and draw its outline on a big piece of paper; plot its capital city, some exciting landmarks, and interesting places to visit. You may wish to make some symbols and a key/legend for your map/design. Could you make a fact file for your country? What type of animals and plants can be found in your country? What language is spoken? What food is eaten and what is its currency?
4. **Organise a fieldtrip.** Locate a local geographical feature - a river, stream, hill, mountain, moor, valley etc. -use a local map if you have one. Visit it!
5. Flick through an atlas and look for **strange and wonderful place names.** Can you pronounce (say) them correctly and find two facts about them?
6. Mark all the **countries people in your family have visited** onto a map. How many continents have they visited?
7. Put together a **collection of toy animals.** Can you place them on a big map according to where they come from?
8. **Construct a weather station** in your garden. A cut-open plastic bottle can be a rain gauge (mark centimetres on the side), a compass can help identify the direction of the wind and if you cut the toe off a lightweight sock and attach it to a stick, it will literally become a windsock! Make a chart and record the weather for a period of time and see how much it changes. Could you present your findings as a weather report?
9. Make a **geography quiz** for your family and friends.
10. Make/play a **game of battleships** to practise co-ordinates.
11. Find out about/draw/make some **world flags.**
12. Plan your **dream holiday.** Where to? What to do/see? How much? Luggage needed.
13. Find out about '**The Seven Wonders of the World**'. Make a collage.
14. Make a **Top Trumps game set** of country cards. Think what categories you could use e.g. Height of the country's tallest mountain, length of the country's longest river, population etc. Research the information, create the cards and finally play the game
15. **Watch BBC Newsround** daily and discuss with family and friends.
https://www.bbc.co.uk/newsround/news/watch_newsround
16. Use **Google maps, Google Earth** to see the world in satellite photo form. Gaze over the landscapes and imagine what life is like in the Sahara, Siberia, the Serengeti etc.
17. Play the new **geography guessing game, Geoguessr**, which asks you to guess locations based on images.....challenge the whole family. <https://www.geoguessr.com/>
18. '**Stack the countries**' is a great app to speed up your world knowledge.
https://play.google.com/store/apps/details?id=com.freecloud.StackTheCountries&hl=en_GB

HISTORY IDEAS FOR SUMMER HOLIDAYS 2020.



1. What can you find out about **local history**? Place names, roads, buildings, cemetery, railway, famous people, market, Penistone Show etc. Look for clues in the environment today.
2. Can you find an **artefact**? What do you think it is? Who might have used it? What is it made from? What is it used for? How is it decorated? What skills were needed to make it? What might it tell us about life at the time? Any other observations? Can you sketch it?
3. **Make a timeline**. This could simply be of your life or a period of history that you have learnt about at school. It could be more challenging to look at key events in British history, World history or a period of history that you are interested in. Could you make this into a **board game** or **sorting cards game**?
4. Make a model of a **historical building**.
5. Could you make up your own **alphabet code** and then write some messages for your friends?
6. Research a **famous historical person** of your choice. If you know your new class name e.g. Year 5 will be Hippocrates - can you find out about them? Make some fact cards about this person.
7. **Research a topic** that interests you and find out about its history - the history of medicine, space, cars, gaming, railways, dance, seaside holidays, slavery etc. Present your findings.
8. Create a **history quiz** with questions for your family and friends.
9. Draw/make a **costume** for a particular period of history - photograph yourself in it.
10. Draw your family tree.



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Springvale Maths Trail - Answers

1A). 8am and 5pm

1B). 9 hours which is 540 minutes

2A). 3.3m

2B). 330cm which is 3300mm

3A). Triangle

3B). Isosceles Triangle

4A). 16

4B). 1, 2, 4, 8, 16

5A). 3 and 8

5B). $3 \times 8 = 24$

6A). 4 by 4's

6B). $4 \times 4 = 16$

7A). 1988

7B). Yes it was a leap year. $1988 \div 4 = 497$

8A). 30/50

8B). $60/100 = 60\%$

9A). 1928

9B). 1930

10A). 1878

10B). 1900

11A). £69,011

11B). £70,000

12A). £20

12B). $\frac{1}{4} = £5$ and $\frac{3}{4} = £15$

13A). 14th August 1916

13B). 31 days in August

14A). 0800 555 111

14B). $8 + 5 + 5 + 5 + 1 + 1 + 1 = 26$ Half of 26 = 13 $13 \times 4 = 52$ cards in a deck

15A). 1914

15B). 638

16A). 764325 and 764178

16B). $764325 - 764178 = 147$

17A). 1913

17B). $1913 \times 6 = 11478$

18A). 2003

18B). 17

19A). 1392

19B). $1392 + 2931 = 4323$

20A). 1763

20B). $3671 - 1763 = 1908$

21A). 2006

21B). A hexagon has 6 sides

22A). 2-3pm Monday - Friday

22B). $60 \times 60 = 3600$ seconds each day

23A). 3

23B). $3 \times 3 \times 3 = 27$

24A). B6462

24B). 6462 is not a multiple of 5 because the last digit is not a 0 or a 5

25A). $2\frac{1}{4}$ miles

25B). There are 9 quarters in $2\frac{1}{4}$

26A). 1699

26B). 99 in Roman Numerals is XCIX

27A). 3

27B). $3 \times 4 \times 5 \times 6 = 360$

28A). 5mph

28B). A pentagon has 5 sides

29A). 14 rectangles in the bottom right panel

29B). $14 \times 100 = 1400$ and $14 \div 100 = 0.14$

30A). 150 and 5

30B). $150 \div 5 = 30$

31A). 7am

31B). 10 and a half hours or 10 hours and 30 minutes

32A). 11

32B). $11 \times 11 = 121$

33A). 15

33B). $90 - 15 = 75$

34A). 2

34B). Prime numbers less than 20 are: 2, 3, 5, 7, 11, 13, 17, 19 (1 is not a prime number)

35A). 1903

35B). $1 \times 9 \times 0 \times 3 = 0$

36A). Circle

36B). Two lines of symmetry

37A). 7.5 T

37B). 3.75

38A). 9

38B). $9 - 5 = 4$ $4 \times 3 = 12$ $12 + 7 = 19$ which is a prime number

39A). B O V I E T C A Y W U

39B). I V A E have a line of symmetry

40A). 10

40B). You get the answer 10 which is the number you started with!

41A). 0800 111 999

41B). $9 \times 9 \times 9 = 729$

42A). 3:30pm

42B). 15:30

Springvale Maths Trail

Part A

Part A is suitable for all children and their families to do together. It starts and finishes at Springvale School, follow the directions and find the answers to each question.

Remember to look high, look low and all around you, there will be a few clues given from time to time. Have fun and Good Luck!

Start at Springvale Primary School outside the main gates. Head up the street towards town but look out for the yellow road sign.

1A). It says No Stopping Monday to Friday between what times?

Walk up the road towards the zebra crossing but look out for the road sign advising drivers of the low bridge.

2A). How tall is the bridge in metres?

Cross the road carefully at the zebra crossing and head towards Green Road.

3A). What shape can you see drawn on the road at the junction with Sheffield Road? There are rectangles and a _____

Continue up Green Road but keep a look out at the houses on the otherside. When you find house 258 look at the telegraph pole on the grass verge.

4A). How many cables are there connected to it?

Continue up Green Road, before you reach Green Acres can you find a yellow 'H' hydrant sign?

5A). What numbers are on the sign?

Cross the road carefully and continue up Green Road. Go through the tunnel and stop when you reach the gateway towards the Trans Pennine Trail.

6A). Look at the sign on the posts as you enter, it says No Motorbikes, No Quad bikes and No _____ by _____'s.

Fork right towards the trail but keep a look out on your left (on the fence).

7A). What year was the Road Traffic Act?

Continue to the trail and take a left towards the train station. Keep looking out at the track, especially when you are next to the wooden bench!

8A). Look at the sign next to the signal light. It is a circular sign and looks like it has a fraction written in it. What is this 'fraction'?

Carry on up the trail towards the train station and take the turn into the station but pause before you go through the gate and have a good look at all the information around you to find the answers to the next four questions.

9A). Look at the sculpture, what year was this produced?

10A). What year was the Factory and Workhouse Act?

11A). In £ what was Penistone's loss in 1924?

12A). What is the minimum penalty for not having a train ticket when you travel?

Go through the gate and stay on platform 2. Look at the board about the Viaduct Collapse.

13A). What date did the line reopen?

Go past the ticket machines and look at the information boards.

14A). What is the phone number for Crime Stoppers?

Head back onto the trail and continue towards town. Before taking the exit to town stop and look at the information board.

15A). What year did the Town Hall open?

Leave the trail and turn right. Cross the road carefully so you walk past the clinic.

Look up at Green Kleen's shop.

16A). There are two phone numbers written on the sign. What are they both?

_____ and _____

Continue up the road towards the cinema and pause outside to have a good look at the building, what shapes do you see? How many noticeboards are there? How many steps?

17A). Looking up at this building, what year were the council offices built?

18A). Look at the bench, what year was the bench placed here?

Cross the road carefully and go into St John's Gardens. Follow the path through the garden and search all around for these next answers. You don't have to leave the path.

19A). What year was Penistone Grammar School founded?

20A). What year was the Cloth Hall built?

21A). What year did they find some old keys in the graveyard during clearance work?

Exit the garden and cross over the road carefully and walk up the hill towards town. Stop by the Vet's for the next question.

22A). What time is the Vet's open each day? (Look at the door.)

Cross the road carefully to the chemist.

23A). How many castles are there?

(You will need to look closely at the wall and signs, you don't need to go round the corner)
(Hint two - it's the word castles you're looking for!)

Head around the corner, pause near the chemist door and look for the next answer!

24A). What road leads to Springvale and Oxspring?

(Hint it's a B road, look for a road sign)

Cross over Shrewsbury Road carefully and then cross over again using the pelican crossing. Head towards the market barn. At the market barn stand with your back to the entrance.

25A). How long (in miles) is the Poetry Trail walk?

Keep looking at this sign for your next answer.

26A). When was Penistone Market granted a Charter?

Whilst at the Market Barn have a look inside and see what shapes you can find, include 2D and 3D shapes. What types of angles can you see? Can you estimate the height of the doors? How many strides does it take you to get from one end to the other?

Go back to High Street and cross the road again using the Pelican crossing and walk towards the library.

Pause outside Penistone Group Practice for the next question.

27A). Look at the lamp post, what number is on it?

Carry on towards the library and carefully cross Victoria Street. Stop at the library.

28A). What is the speed limit shown on the library wall?

Staying outside the library look at St. Andrew's Church and look at the Stained-Glass windows. They are made up of different rectangles making a tessellation.

29A). How many rectangles are there in the bottom right panel?

Cross Ward Street and cross Unwin Street and turn down Green Road, pause briefly at the top before turning down the road. (By the green fenced area.)

30A). What numbers are on the yellow 'H' hydrant sign?

31A). What time is the post collected on a Saturday?

Carry on down Green Road and cross over the road just before Lyndhurst Bank. Looking all around (look up!) this is the official home of PFRAC Road Running Division. (Can you find the sign? You need to look at the grassed area between the footpath and Lyndhurst Bank.)

32A). What number is between the letters LP and RRD?

Before crossing Lyndhurst Bank look at the street sign. Which road does this lead too?

33A). How many letters make up this Street name? (Not Lyndhurst Bank, the other road!)

Find a safe place to cross Green Road and head towards the bus stop.

34A). Behind the bus stop is a telegraph pole that is no longer in use. What number is on the pole? (It is broken and faded so look carefully.)

Cross Chantry Avenue and continue down Green Road but you will need to look up!

35A). What year was Castle Terrace built?

Stop at the gateway to SPXFlow. (Stay on the pavement though!)

36A). What shape is around the green R?

Continue down Green Road but cross over at a safe place to go up Castle Lane.

37A). What is the maximum weight a vehicle can be to drive on this road?

Walk up Castle Lane until you reach some steps on your left.

38A). How many steps are there?

Go back up the steps and continue walking up Castle Lane until you get to Bosville Street. Walk down Bosville Street to Green Road but stop by the street name sign at the bottom.

39A). Look at all the street names. Which letters have at least one line of symmetry?

Cross Green Road carefully.

40A). How many bollards are there?

Walk down Green Road and stop at the traffic lights. Looking at the bridge, what shapes can you see?

Continue down Green Road and carefully cross Green Acres, walk down until you reach the junction with Sheffield Road.

41A). Still on Green Road, can you find the Emergency Gas phone number?

Cross the zebra crossing and head back to the school gates. With your back to school look across the road to the Methodist Church.

42A). What time do Penistone Community Church meet?

Well done! You have completed the Maths Trail, we hope you had fun!

Springvale Maths Trail

Part B

Use your answers from Part A to answer these questions.

1B). How many hours is this? Can you work out how many minutes this is?

2B). Can you convert this into cm? What about mm?

3B). This triangle has a special name because two sides are the same length and two angles are the same size. What type of triangle is it?

4B). Can you list all the factors of this number? Remember factors divide exactly into a number without any remainders. You should be able to find 5 factors.

5B). When we multiply two numbers together we find their product. What is the product of these two numbers?

6B). If these were the lengths of the sides on a square what would be the area of the square?

7B). Leap years are divisible by 4. Was this year a leap year?

8B). Can you change this fraction to have a denominator of 100? What would this be as a percentage?

9B). Can you round this number to the nearest 10?

10B). Can you round this number to the nearest 100?

11B). Can you round this number to the nearest 10,000?

12B). By finding $\frac{1}{4}$ of this number first work out what $\frac{3}{4}$ of this number is.

13B). How many days are there in this month?

14B). Add up all the digits in this number and then divide it by 2. This is how many cards are in each suit in a deck of cards. Can you work out how many cards there are altogether in a deck of cards?

(e.g. for the number 123 the digits are 1, 2, 3 adding them together would give 6)

15B). Divide this number by 3.

16B). Find the difference (subtraction) between these two numbers.

17B). Can you multiply this year by 6?

18B). How many years ago was this?

19B). Reverse the digits of the year and add the new number to the original number.

(e.g. If the year was 1234 the reverse would be 4321 and then add together 1234 and 4321)

20B). Reverse the digits of this year and subtract the smaller number from the larger number.

21B). Look at the last digit in this year. What is the name of a shape with this number of sides?

22B). How many seconds is it open for each day?

23B). A cube number is when you multiply a number by itself 3 times. 2 cubed is $2 \times 2 \times 2 = 8$
Can you cube the number of castles?

24B). Is this number a multiple of 5? Can you explain how you know?

25B). How many $\frac{1}{4}$ are there in this number?

26B). Looking just at the last two digits of this year. Can you write this number using Roman Numerals?

27B). Take this number and multiply it by 4, then the answer by 5 and then again by 6. What do you get? You should get the number of degrees in a circle!

28B). What is the name of a shape with this number of sides?

29B). Can you multiply this number by 100? Can you divide this number by 100?

30B). Divide the top number by the bottom number, what do you get?

31B). If I post a letter in here on a Friday at 8:30pm how long will my letter be sat in the postbox for?

32B). Multiply this number by itself, what do you get? This is called a square number.

33B). What would I need to add to this number to give the number of degrees in a right angle?

34B). This is a special number it is the only even prime number. Can you list all the prime numbers less than 20? (There are eight altogether.)

35B). Split this number into 4 digits and multiply the 4 digits together.

36B). How many lines of symmetry does the letter X have?

37B). Work out half of this number?

38B). Take this number and subtract 5, then multiply by 3 and then add 7. What did you get? What type of number is this? (Hint: Look back at question 34 if you've forgotten.)

39B). Write Springvale in capital letters, how many have at least one line of symmetry?

40B). Take the number of bollards and add 5, then multiply by 2, next subtract 10 and then divide by 2. What do you notice? Can you explain why that happened?

41B). Take the last three digits of this number and multiply them together to make a cube number. (e.g. if the last three digits were 555 work out $5 \times 5 \times 5 = 125$ and 125 is a cube number.)

42B). Can you write this time using the 24 hour clock?

Springvale Maths Trail - Part C

You will need to use your answers to Part B to solve the coded message.

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

Work out the answer to the problem and then use the table to find the corresponding letter.

Example: Answer 6 ÷ Answer 36 this would be $16 \div 2 = 8$ and 8 is letter H

Answer 38 - Answer 40 this would be $19 - 10 = 9$ and 9 is letter I

This example gives the coded message HI. Good luck solving the coded message!

HINT: Answer 1 is the time in hours not minutes.

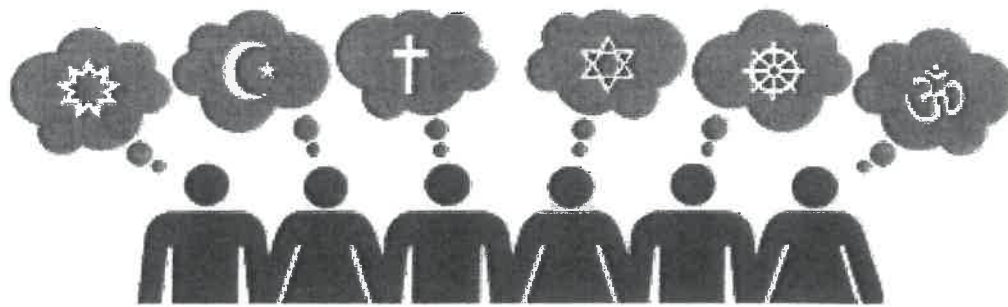
1. Answer 12 + Answer 39
2. Answer 13 - Answer 12
3. Double Answer 1
4. Answer 5 - Answer 12
5. Answer 5 - Answer 40
6. Answer 11 ÷ 10,000
7. Answer 9 - Answer 20
8. Answer 13 - Answer 30
9. $3 \times$ Answer 39
10. Answer 12 ÷ 3
11. Answer 16 - Answer 32 - Answer 40
12. Answer 6 + Answer 36
13. Answer 23 ÷ 3
14. Answer 14 ÷ 4
15. Answer 31 - $9\frac{1}{2}$
16. Answer 1 + Answer 25
17. Answer 23 - Answer 36
18. Answer 25 + Answer 35
19. Answer 10 ÷ 100
20. $2 \times$ Answer 40
21. Answer 20 - Answer 10
22. Answer 8 ÷ 12
23. Answer 38 - Answer 18
24. Answer 40 ÷ Answer 36
25. Answer 16 - 128
26. Answer 1 + Answer 25 + Answer 36



Music ideas for the summer holidays 2020

- Try listening to a new music style: Did you enjoy it? What instruments could you hear? What kind of tempo was it? Did the music change during the piece, if so how? What did you like/not like about it? Would you listen to more music in this style?
- Create your own instruments out of junk, can you make different kinds of instruments that you play in different ways? E.g. tapping, shaking, plucking, blowing?
- Choose a song/piece of music and make up your own dance to go with it.
- Look at the lyrics in a favourite song and have a go at writing your own verse.
- Create your own playlist for a disco, think about which songs fit well together, whether you will have a change in mood e.g. some fast, some slow songs – if you have all the songs available you could have your own disco with your family.
- Listen to a song/piece of music and create some artwork that reflects what you think of when you listen to it.
- Choose a musical to watch with your family, if there is a singalong version, try it out!
- Research a favourite musical artist – what interesting facts can you find out about them?
- Check out these websites for lots more music learning and activities:
<https://www.bbc.co.uk/teach/ten-pieces>
<https://www.classicsforkids.com/>





Faith ideas for the summer holidays 2020

- All religions have special festivals, have a go at designing your own festival. What will it be celebrating? What date/time of year will it be? What will the special clothes, dance, decorations, food be? Will there be any important things people must do?
- Research special food for a religious festival (e.g. Diwali, eid-ul-fitr, Hanukkah). Is there a dish you can have a go at making?

- Find out what places of worship there are in the local area (for any religion). Maybe visit some if you can and notice some of features of them.
- Find out about the place of worship for a religion (a church, synagogue, mosque, hindu temple. . Research what they include, what special customs do they practise, can you design your own version, maybe make a 3D model of it?



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- Most religions have important rules that their members must try to follow. Can you make up your own set of rules for the summer holidays? Make sure they are safe to follow!
- Most religions teach about treating others as we would want to be treated, acts of good deeds and loving each other. Can make a list/poster of good deeds you would be able to do to help others (remember these can be simple things like saying kind words, or tasks that would help around the house.) Have a go at doing as many as you can, you will be amazed at how good it makes you feel as well as cheering someone else up!
- How many of the symbols at the top of the page do you recognise? Can you find out which religion uses each symbol?
- Check out https://www.youtube.com/playlist?list=PLcvEcrsF_9zK0q_Ey3yI7k5LA5v1M7NNs for lots of interesting clips about different religions.

READING IDEAS FOR SUMMER HOLIDAYS 2020

1. **Fiction: Read The Spiderwick Chronicles-** Read through and discuss the texts. Ask your child to retell what happened-together you could each take on the role of one of the children. Recounts help children deepen their understanding and appreciation of a good book. Click on this link to find the text:
<https://www.teachwire.net/news/ks2-book-topic-the-spiderwick-chronicles>
2. **Fiction: Read for Pleasure-** This is developed through a daily read-aloud programme of great books and page turners, as well as access to a wide range of titles, including comedy, comics and graphic novels. Time is devoted to daily quiet reading, even if only for 15 minutes. Suggested books are: Cogheart by Peter Bunzl or Kiran Millwood Hargrave's The Girl of Ink and Stars.
3. **Poetry: Describe bikes, cars, planes and more with descriptive poems-** Poetry in motion, see how many similes and metaphors you can use to describe all the parts of a bicycle or car. Use this link to read the poems <https://www.teachwire.net/teaching-resources/pie-corbett-poetry-ks2-describe-bikes-cars-planes-and-more-with-descriptive>
4. **Fiction: Reading Comprehension and mystery story modelling with 'Watch Out'** - There's more to Pie Corbett's story than first meets the eye - children will need to read closely to uncover its themes. Use reading comprehension to unearth the mystery.
<https://www.teachwire.net/teaching-resources/pie-corbetts-ks2-creative-fiction-reading-comprehension-story-modelling-watch-out>
5. **Story Explorers:** Have you ever wanted to explore a story? Perhaps you would like to visit the Chocolate Factory with Charlie, ride a polar bear in the frozen North with Lyra or travel to Middle-earth's Lonely Mountain with Bilbo Baggins? The resource includes:
A teaching toolkit with fun ideas and activities to explore story settings and prepare students for the challenge
Two brilliant extracts from The Wolf Wilder and The Explorer by Katherine Rundell demonstrating amazing story location. A downloadable certificate of achievement for all children who complete the task.
<https://literacytrust.org.uk/resources/story-explorers/>
6. **The Witches Discussion Sheet:** Watch the official World Book Day Bedtime Story and then discuss the video using the prompt sheet to help drive your conversation.
<https://www.worldbookday.com/resource/the-witches-world-book-day-bedtime-story-discussion-sheet/>
7. **Independent Fiction Reading Activities-**
 - Pick a descriptive word from the text, write it down and use a thesaurus to write down five synonyms and antonyms for that word.
 - Re-read a chapter - pick out 10 words that you feel are powerful words and that you could use in your own writing.
 - How does the story hook you in at the beginning? Make a list of words or phrases that you feel are effective in making you want to read on.
 - Predict what might happen when you are part way through a book. Write your prediction in the form of a story plan in boxes.
 - Write about a memory or experience of your own that is similar to something you have read in your book.
 - Make a list of questions you ask yourself as you read.

8. Independent Non-Fiction Reading Activities-

- Write an introduction for a non-fiction book
- Compare your book with another book on the same subject. What are the differences? Which one is better?
- Create a glossary of technical words that relate to the topic of your book.
- What are the properties of this Non-fiction book? Give evidence for your answer.
- Make a Did you Know? Poster of amazing facts from your book.
- Draw and label a diagram using factual information.
- Create a title page for your non-fiction book. Include a picture, the title, author and illustrator.
- Write a letter to a scientist about the subject of the book, asking five more questions.
- Make an Amazing/Obvious graph of facts from your book.
- Write down 5 true things and 5 lies about your book. Give to a partner. Can you trick them?
- Make a list of facts you have learned from your non-fiction book.

9. Complete the Summer Reading Challenge- Join the Silly Squad on their fantastic reading adventure- find all the information at: <https://summerreadingchallenge.org.uk/>

Bubble Cubes

You will need:

- Bubble mixture (see below)
- Something to make a frame - pipe cleaners or K'NEX work well
- Deep bowl/bucket

1. Make your bubble mixture (enough to fill the deep bowl/bucket).

2. Use pipe cleaners or anything you have available at home to make a cube frame. Even rolled up paper and tape might work!

3. Dip your frame so it is completely submerged in the bubble mixture.

4. Giving the cube a gentle shake helps the soap film even out and causes excess solution to drip back into the bucket. Set the bubble cube on a flat surface to keep the bubble film stable.

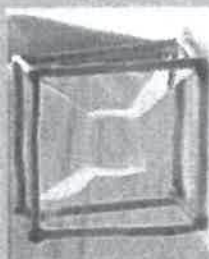
Bubble Mixture - add 2

tablespoons of granulated sugar and 4 tablespoons of dish soap to 500ml of warm water then gently stir (avoiding foam). For best results, leave for 24 hours.

THE SCIENCE

Bubbles use a minimum amount of surface area needed to enclose the volume of air trapped inside. In this activity, however, as you dip the cube into the bubble solution, the solution stretches between the edges and the soap film clings to the sides of the cube. This causes the bubbles to appear cubic. The soap film connects the shortest possible distance while still connecting all sides.

Notice, however, that even the bubble you blow into the centre at the end bulges slightly on its sides. Bubbles love a spherical shape!



Emoji Traumatropes

You will need:

- Straw
- White paper
- Felt tip pens
- Tape/glue

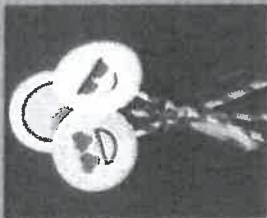
1. Cut 2 circles of paper - make sure they are the same size.

2. Colour a yellow circle on one of the pieces and an emoji face in the centre of the other.

3. Attach the circles to either side of the straw with tape or glue.

4. Spin the straw between your hands and suddenly you have a full emoji before your eyes!

Once you've mastered it, try different pictures such as a fish on one circle and a bowl on the other.



THE SCIENCE

When you spin the straw between your hands, instead of seeing one of the pictures or the other, you see a combined version of the two.

This is due to a phenomenon called *persistence of vision*. The human eye can only see

10 to 12 images per second and the brain can still be

processing after the image disappears. If a new image

replaces the first image while the brain is still processing, it

will interpret the image as a combination of the two.



Fireworks in a Glass

You will need:

- A glass or jar
- Small bowl
- 3-4 tablespoons of oil
- Warm water
- Food colouring (different colours)
- Fork

1. Fill the glass or jar about ¾ full with warm water.

2. In a separate bowl, add 3-4 tablespoons of oil and carefully add a few drops of different coloured food colouring.

3. Mix it all gently with a fork - just enough to disperse the food colouring a little bit. You'll notice it doesn't mix with the oil - it just breaks up into smaller dots.

4. Pour the oil and colour mixture into the warm water.

5. Watch as the coloured drops sink down into the water and mix together creating a firework effect.



THE SCIENCE

This is all to do with the density of each liquid (how heavy it is for its size). Food colouring dissolves in water but not in oil. Because the

oil is less dense than the water, it will float at the

top. The coloured droplets sink because they are denser

than the oil. As they sink to the bottom of the oil, they

mix with the water and begin to dissolve, creating

tiny 'explosions'.

©MrsDprSTEM

©MrsDprSTEM

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The Incredible Hoop Glider

You will need:

- Card
- Tape
- Paper straw (or a tube of rolled up card if you don't have one)

1. Cut 2 strips of card so that one is twice as long as the other (you may need to stick some together!)
2. Loop your strips into a bigger and a small circle then tape to secure.
3. Using a straw (or tube of rolled card), tape the hoops you have just made to either end of the straw. It works better if you tape the straw to the inside of the hoops.

4. You're ready to fly! Hold the straw in the middle with the hoops on top and throw it in the air slightly angled upwards. With some practice, you can get it to fly much further than many paper aeroplanes.



THE SCIENCE

Gravity pulls the glider down and the hoops acts as wings and lift the glider up. The two sizes of hoops help to keep the straw balanced as it flies. The big hoop creates "drag" (or air resistance) which helps keep the straw level while the smaller hoop in at the front keeps your glider from turning off course.



©MrsBpinSTEM

Grow your own Hanging Crystals

You will need:

- Two glass jars
- Hot water
- Bicarbonate of soda
- Two paper clips
- String or wool
- Small plate

1. Pour hot water into the two jars and stir in bicarbonate of soda until no more will dissolve (about 6 teaspoons). When a layer forms at the bottom of the jar, this means no more will dissolve.
2. Tie a paper clip to each end of the piece of wool or string and place each end in each jar so it hangs between.
3. Put a small plate underneath the wool between the jars.
4. Leave the jars for a week. Crystals will begin to form along the wool - hanging down like stalactites. You may even get crystal stalagmites forming on the plate!

THE SCIENCE

You've created a super-saturated solution. Hot water can hold more dissolved bicarb than cold water because the molecules are further apart. When the water cools, the bicarb can no longer fit in the water and 'clings' to the wool. As the water evaporates, crystals form. These crystal strings get longer as more water drips down.



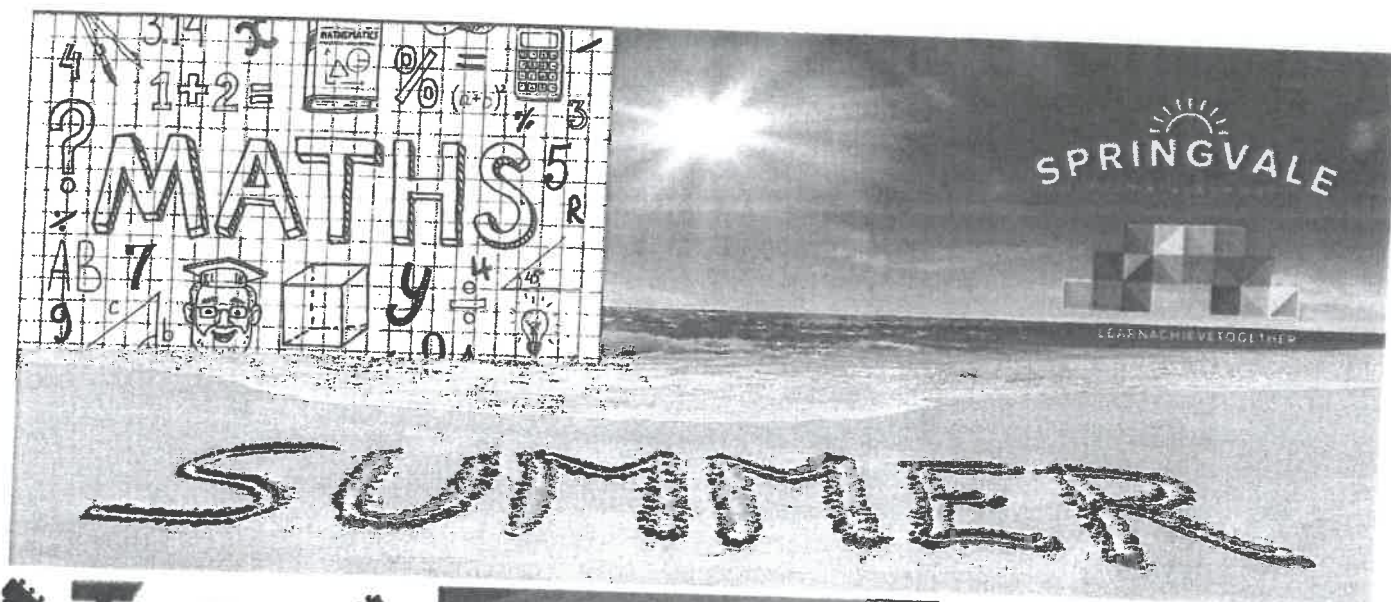
©MrsBpinSTEM

Adult supervision required due hot water being used.

Here are a few Science based activities for you to try during the summer break.

Feel free to post any pictures on Twitter or send an email to

j.alderon@springvaleprimary.org



SUMMER MATHS TRAIL FUN

USE THE CLUES TO HUNT FOR THE ANSWERS AROUND THE LOCAL AREA

SUITABLE FOR ALL FAMILIES!!

SEE SEPARATE "MATHS TRAIL" DOCUMENT

Nim-7 for Two

Ages 5 to 14



Here's a game to play with an adult! This is a basic form of the ancient game of Nim.

How do you play?

You'll need an adult to play with.

You will also need seven objects, such as counters or blocks.

Place the 7 counters in a pile and starting with the adult, take turns to take away either one or two counters.

The person who takes the last counter wins.

Swap who goes first, and keep playing until you work out a winning strategy.

Does it matter who has the first turn?

What happens when there are three counters left?

How can you win at this game?

What happens when you start the game with more counters?

Other great games and ideas (not interactive; but instructions and examples on the links)

Strike it out for two... <https://nrich.maths.org/10091>

Totality for two (need a printer) <https://nrich.maths.org/11114>

How many? Look at these pictures and guess how many...then see if you can use your method to count things around you...maybe leaves on trees? Crisps in a packet? Pages in a book? Did you get close? What methods did you use?
<https://nrich.maths.org/14404/note>



*Remember - keep up with Numbots and Ttrockstars!

WRITING IDEAS FOR SUMMER HOLIDAYS 2020

1. **Fiction: Write a story using one of these five basic plots:**
Overcoming the monster
Rage to riches
The quest
Voyage and return
Rebirth
Suggested stories you could use to help you can be found on this website
www.creative-writing-prompts-activities-and-resources-for-ks1-and-ks2-english
2. **Fiction: Write a story for the screen-** This resource will help to explore the work that goes into making a film, and invite pupils to consider what goes into creating a good, memorable story for the screen. Download the accompanying resources part 2, Shaun the Sheep: Making your movie and part 3, Shaun the Sheep: Secret of sound from www.intofilm.org/resources
3. **Fiction and Non-Fiction: Use a photo or a picture as a writing prompt-** using images as writing prompts is nothing new, but it's fun and effective. The Literacy Shed has a page dedicated to interesting images it has already rounded up in various categories. There are winter scenes, abandoned places, landscape, woodlands, pathways, statues and even flying houses. <https://www.literacyshed.com/the-images-shed.html>
4. **Fiction: Hone their storywriting techniques-**using Pie Corbett resources you can: harness children's dreams and imaginations in *My Iceland*, build excitement and suspense with *The Old Mill* or learn super writing techniques with *Fowler's Yard*. All resources can be found on this website <https://www.teachwire.net/authors/pie-corbett>
5. **Non-Fiction: Get into Dr Who and debate whether you'd like a Dalek for a neighbour-** write a for and against argument using this resource to help you:
<https://www.teachwire.net/teaching-resources/pie-corbetts-non-fiction-get-into-dr-who-and-debate-whether-you-d-like-a-dal>
6. **Non-Fiction: Persuasive writing with the Alex Rider Series-** Break out the gadgets and go undercover with Pie Corbett's Alex Rider-themed look at persuasive writing. Use this resource to help you
<https://www.teachwire.net/teaching-resources/pie-corbetts-non-fiction-persuasive-writing-with-the-alex-ryder-series>
7. **Poetry: Space Poems for Creative Descriptive Writing-**Blast off into the unknown and discover a galaxy of poems including the rubbish-tip alien. Use this resource to help you
<https://www.teachwire.net/teaching-resources/pie-corbett-poetry-for-ks2-space-poems-for-creative-descriptive-writing>
8. **Poetry: Use Mythological creatures and invent Fantastical Beasts to boost Reading and Writing-** Indulge your natural relish for the gloriously grim to enhance your creativity! Use this resource to help you
<https://www.teachwire.net/teaching-resources/pie-corbett-monster-poetry-ks2-use-mythological-creatures-and-invent-fantas>
9. **Fiction: Inspire writing by reading great books and learn what makes stories work-** These book topics feature a range of great activities to help inspire children's creative endeavours. Use these websites to download three wonderful stories:
<https://www.teachwire.net/teaching-resources/mythology-folktalkes-and-creative-writing-with-the-dragon-snatcher-ks2-book#login-box24>

<https://www.teachwire.net/teaching-resources/use-francesca-simons-do-you-speak-english-moon-to-explore-friendship-and-em>

<https://www.teachwire.net/teaching-resources/use-scaredy-squirrel-to-help-ks1-children-face-their-fears-through-creative>

10. **Fiction: Get Creative Journal** inspired by the author Jacqueline Wilson- Taking inspiration from Jacqueline Wilson's brilliant characters, fire your imagination and get your creative juices flowing and write your own boredom-busting activity journal!
11. **Fiction: Charlie and the Chocolate Factory** writing ideas and lesson plans- https://www.roalddahl.com/docs/CharlieLessonPlans_1522150621.pdf
12. **Fiction: The Twits** writing ideas and lesson plans https://www.roalddahl.com/docs/TheTwitsLessonPlans_1522151225.pdf
13. **Fiction: Write a magic potion** based on J K Rowling's Harry Potter books- use the books to help provide you with lots of ideas!
14. **Fiction: Write a traditional story from a different point of view**- You could write Cinderella from the point of view of one of the ugly sisters, or write The Three Billy Goats Gruff from the point of view of the troll or write Goldilocks and the Three Bears from the point of view of Baby Bear.
15. **Non-Fiction/Fiction: When I am famous!** "In the future everyone will be famous for 15 minutes"- Andy Warhol. Discuss the above quote and talk about what it means to be famous. You could then go on to write:
 - An account of what you would be famous for, and why
 - A diary, written as if you are famous in the future. How are you feeling about this? What things do you have to do?
 - A newspaper interview, written as if in the future when you are famous.
16. **Fiction: Write a story based on an advert**- In the back of many books, there are often adverts for other stories. Why not choose one of these adverts, and write a story based on the description of the story in the advert. You don't need to have read the book which is being advertised, you can just compare your own story to the real version when you have finished.
17. **Fiction: Write a description of a new animal**- A good way of using your descriptive writing skills is to invent a new animal. Describe what it looks like, where it lives, what it does, what it eats etc. It might be useful to discuss existing animals and their characteristics beforehand.

Mrs Tomlinson's Art & DT Summer Holiday Challenges

Wacky Wheels- Cut out a circle from an old cardboard box. Have a go at creating a wheel print using this as a template. Perhaps you could use some string to create the spokes? Think about how you could stop the string from moving when you use it to print your design. How will you create your print? You could use paint or make a rubbing? Alternatively you could draw around the circle and create a repeating pattern. Look at this [Sonia Delaunay print](#) for inspiration. Share photos of your print via email or Twitter.

Float your Boat!- Have a go at designing and making some model boats. You could make a few out of different materials. Think about the qualities that the materials will need. What shape will make the best boat? Why? Perhaps you could use some recycled junk? Construct your boats and then predict whether or not they will float. Then you could test them in the bath or in a paddling pool. Which design floats the longest or travels the furthest? Do any of your boats stay afloat if you put some coins in them?

Fruit and Vegetables – Watch this [video](#) that explains the work of the artist Lynn Flavell. She uses fruits and vegetables to print repeating patterns. Can you create a piece of artwork in the style of Lynn Flavell?

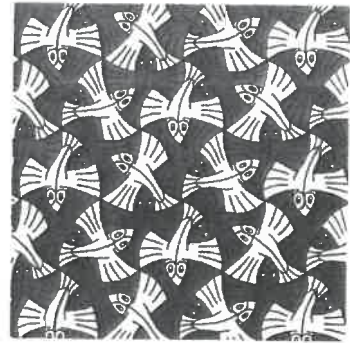
What's in your fruit bowl? Vincent Van Gough painted what was in his fruit bowl. You can see this painting [here](#). This is known as a 'still life' painting. A still life is a representation of household objects (often food or flowers) in a picture. Can you draw what's in your fruit bowl? Look carefully at the sizes and shapes of the fruit. Think about their sizes when they are next to each other. Where is the light coming from? This will help you to create the shadows. You might decide to leave this as a pencil sketch, or perhaps you'll add some colour? It's up to you.

Tweet Tweet! Have you noticed the birds singing outside? Have you spotted any birds? Watch this [video](#) for some tips on how to draw birds and get started drawing your favourite garden bird. You may wish to find a picture in a book to draw from as birds don't usually sit still for very long!

Oodles of Doodles! Many of you have read the Tom Gates books by Liz Pichon. The books are full of really cool doodles. Click [here](#) to find out how she does it. Your task is to create a doodle with your name and words that mean something to you in the style of Liz Pichon.

Lets Tessellate! Do you know what a tessellating means? It is where something is covered with a pattern of repeated shapes, especially polygons that fit together closely without gaps or overlapping. Here is an example of one of M. Escher's tessellations.

You can research more of Escher's work online. What do you notice about his style? Where do you think he gets his inspiration from? Use these videos as a guide to create your own tessellations: [Fish](#) or [Frog](#)

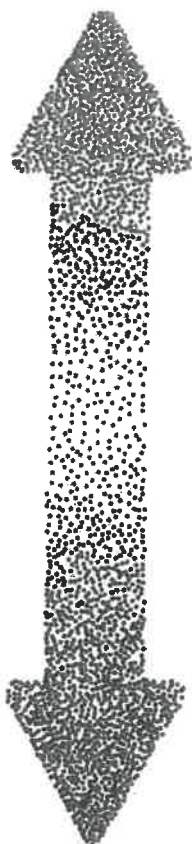


Computing Activities for the Summer Holidays

Below are some activities you can try over the holidays. They have been split into the three strands of computing we use in school. Have fun!!

Computer Programmers

Easier

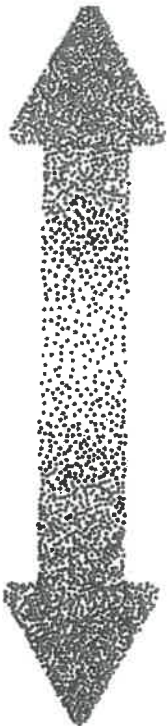


Harder

- Take pictures of daily tasks and jumble them up. Can you put them back into the right order? Can you write the instructions to go with them?
- Be a robot! Complete a simple task like making a jam sandwich. Remember, robots only do EXACTLY what the user tells them to do. Watch this video for an idea how this works: <https://www.youtube.com/watch?v=leBEFaVHIIE> (This one can be made more difficult with how precise you force the child to be! When it goes wrong, allow them time to go back and rework their algorithm.)
- Make a treasure map of the garden. Draw an aerial picture of the garden and split it into a grid. Use arrows, words or symbols as a guide to the treasure.
- Play human Pacman. Three people needed. One person is Pacman, one is the ghost and the other is the player. The player can shout instructions to Pacman (like turn left, turn right, forwards and backwards). Scatter object around the garden that Pacman has to collect. The ghost has to catch Pacman. Pacman can jog, the ghost can only walk.
- Use <https://code.org/hourofcode/overview>
- <https://scratch.mit.edu/help/videos/> This website has loads of great videos to teach you how to make things on <https://scratch.mit.edu> Its free to make an account, which is the best way to save you work.

Computer Users (Anything with a * should be supervised)

Easier

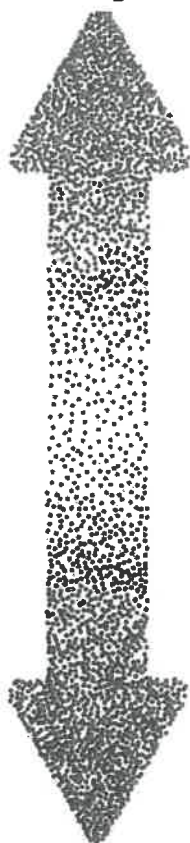


Harder

- Use a word processor to write a sentence.
- Use a word processor to write a story.
- Use Paint to paint a picture.
- Print something (if you have a printer, of course).
- Use this website to learn your way around a keyboard:
<https://www.bbc.co.uk/bitesize/topics/zf2f9j6/articles/z3c6tfr>
- Save a picture and add it to your story or take a picture and put it into a document with some writing with it.
- Email a trusted adult (us teachers love hearing what you've been up to!)*
- Send an email with an attachment.*
- Use <https://soundation.com/> to make some banging tunes!! (Adults will need to make a free account)
- Take a picture and edit it on a phone.*
- Make your typing even faster with these: <https://www.typing.com/student/games>
- Make a video call to a family member.*

Online Safety

Younger



Older

- <https://www.commonsense.org/education/digital-citizenship/curriculum?grades=k%2C1%2C2> This link will take you to some great activities suitable for KS1
- Years 1 and 2 can talk to you about what personal information is, who you can trust and why you should have breaks from tech.
- This one is for Years 3, 4 and 5: <https://www.commonsense.org/education/digital-citizenship/curriculum?grades=3%2C4%2C5>
- Years 3, 4 and 5 can talk about identifying behaviour online that is unwanted and unkind and what to do about it.
- These year groups could make a info pack or video guide on age ratings for games.
- Years 3, 4, 5 and 6 can make a 'safe selfie guide' that talks about what is ok and not ok to include in the picture and who you need permission from to post an image. Who does it affect? What can you do if there is a picture of you that you don't want online?
- KS2 can talk about who to be friends with online. How can you connect with your friends safely online? Can you really know who you're taking to.
 1. Make a landscape A4 sheet with your real picture, real name and age
 2. Draw a computer screen (a grey border around a new landscape A4 sheet.)
 3. On that computer screen, make up a picture, name and age.
 4. Cut the fake details in half and glue each half along the outside short edges and stick them over the top of the real details, so you can open them like doors.

This will show who's 'behind' the fake details to show that anyone could pretend to be someone else!

- Years 5 and 6 can look at the concept of 'fake news' and how not everything they read online is true.
- Investigate 'clickbait' (it's one of the activities in the link above)
- This link is for activities that Year 6 and upwards can do: <https://www.commonsense.org/education/digital-citizenship/curriculum?grades=6%2C7%2C8>

MINDFULNESS AND WELLBEING IDEAS

FOR SUMMER HOLIDAYS 2020



1. A picture book for children worried about the Coronavirus:

<https://en.calameo.com/read/000777721945cfe5bb9cc?authid=Xu9pcOzU3TQx>

2. Mindfulness:

Mindfulness colouring is a relaxing and calming activity which can also encourage children to explore their creativity while improving fine motor skills!

Colouring in pages:

<https://www.teachingideas.co.uk/2d-art/mindfulness-colouring-images-animals>

<https://www.bestcoloringpagesforkids.com/mindfulness-coloring-pages.html>

A five or ten-minute daily mindfulness practice can help to reduce stress and anxiety.

5-10 minute activities:

<https://www.teachstarter.com/gb/blog/classroom-mindfulness-activities-for-children-gb/>

3. Meditation:

Meditation can help to regulate children's emotions as well as improve concentration and focus.

<https://annakaharris.com/mindfulness-for-children/>

4. Self-esteem:

Self-esteem helps children cope with mistakes and build their resilience. It helps them try again, even if they fail at first. As a result, self-esteem will help them do better at school, at home, and with friends. Children with low self-esteem feel unsure of themselves, so improving self-esteem, improves confidence.

<http://www.plantlovegrow.com/self-esteem.html>

<https://www.kidsplayandcreate.com/self-esteem-character-building-activities-for-kids/>

5. Self-care:

Self-care is about the things that we can do to look after our own mental health.

<https://www.annafreud.org/on-my-mind/self-care/>

<https://www.childline.org.uk/toolbox/calm-zone/>

6. Yoga:

Yoga helps children to boost confidence. Regular practicing of yoga helps your child to grow self-confidence.

<https://www.cosmickids.com/>



5 Ways to Wellbeing Summer Activity Ideas

Welcome to the Team+ 5 Ways to Wellbeing Summer Activity Ideas Booklet.

Each week of the summer holidays, you have the opportunity to connect with the world around you, get outside and be active, learn some new fun things, give to other people, and take notice of what is happening all around you...all really cool things to help you feel amazing.

Don't worry - this isn't a competition to see who can do the activities the fastest, or who can do the most. The aim is simple - HAVE FUN!!!!

There are 5 activities per week - you can do one per day, or you can do all 5 activities every day...it's entirely up to you. One thing is for certain - these activities are assured to help you become an outstanding WELLBEING WARRIOR!!!

Why don't you send us a picture of the fantastic fun that you have - you can tag us on Twitter (@TeamActivPlus), or on Facebook (@teamactiv)...we'd love to see what you guys are getting up to over the summer holidays.

Week 1	
Activity	
Monday - Connect	Can you say hello to your 3 different people? Can you wave at 3 different people?
Tuesday - Be Active	How many steps can you do today?
Wednesday - Keep Learning	Can you learn how to say hello in 3 different languages?
Thursday - Give	Can you make a 'keep smiling and carry on' card for a neighbour?
Friday - Take Notice	Whilst out on your daily walk, can you see 5 different things that are red?

Week 2	Activity
Monday - Connect	Ask a member of family 5 questions to get to know them better
Tuesday - Be Active	How many steps can you do today? Can you do 1,000 steps more than last week?
Wednesday - Keep Learning	Can you learn how to say thank you in 3 different languages?
Thursday - Give	Give your best friend a letter telling them how much you miss them
Friday - Take Notice	Find 5 different types of flowers

Week 3		Activity
Monday - Connect		Get to know your role model
Tuesday - Be Active		How many jumping jacks can you do in 1 minute
Wednesday - Keep Learning		Learn to say simple phrases in sign language
Thursday - Give		Give your parent/guardian a drawn picture of you together
Friday - Give Notice		Do an indoor scavenger hunt using the alphabet

Week 4	
Monday - Connect	Can you do your family tree?
Tuesday - Be Active	Can you do more Jumping Jacks in 1 minute than last week?
Wednesday - Keep Learning	Can you learn how to tell the world's funniest joke?
Thursday - Give	Can you give your loved ones a dancing performance?
Friday - Take Notice	Can you see 1 bird, 2 dogs, 3 trees, 4 people and 5 different coloured cars whilst out on a walk?

Week 5	Activity
Monday - Connect	Get to know a relative
Tuesday - Be Active	Run as many laps as you can in 2 minutes
Wednesday - Keep Learning	Research a country (either somewhere you have been or somewhere you want to go)
Thursday - Give	Give your parent a musical performance
Friday - Take Notice	Do an outdoor scavenger hunt using the alphabet

Week 6		Activity
Monday - Connect		Say hello to 3 new people, smile friendly at neighbours
Tuesday - Be Active		Ride your bike or scooter for 5 minutes
Wednesday - Keep Learning		Find everything you can about the town where you live
Thursday - Give		Give a family member a homemade piece of art
Friday - Take Notice		Keep a count of the number of dogs you have seen.