Let's get familiar with the 100 square!
Try practising some of these activities every day.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

## 100 square games and activities

Pick a number to start from and count in 1's, 2's, 5's and 10's.
\| Make it fun and count in funny voices - can you count like a robot or with a very high voice?
I Cover up several numbers on the 100 square. Can you work out which numbers are missing?

- Find all the numbers whose digits add up to 15 . Then pick another total.
| Pick two numbers. Find the difference. Find the total.




## Let's Multiply!

It can help us in lots of areas of maths if we can quickly recall our multiplication facts.
Let's get practising our $3 x, 4 x, 6 x$ and $8 x$ table!


## Learning Tips

I. March like a soldier and chant the multiplication tables e.g. $1 \times 3=3,2 \times 3=6$.

I Play multiplication ping pong with one person batting the question and the other batting back the answer.

## Quick Questions

1. $2 \times 3=$ $\qquad$ 6. $3 \times 3=$ $\qquad$
$\qquad$ 7. $8 \times 8=$ $\qquad$
$\qquad$ 8. $1 \times 6=$ $\qquad$I
2. $6 \times 8=$ $\qquad$
3. $12 \times 4=$ $\qquad$I

$\qquad$
10. $4 \times 3=$
$\qquad$
5. $2 \times 4=$ $10.4 \times 3$I


## Le†'s Multiply Some More!

It can help us in lots of areas of maths if we can quickly recall our multiplication facts.
Let's get practising our $7 x, 9 x, 11 x$ and $12 x$ table!



## What's Missing?

Blue-Bot has been cheeky and stolen lots of numbers and operations. Become a maths detective and see if you can solve these problems and fill in the missing gaps.



## Dip \& Pick

## Have a go at our Dip \& Pick problems...



## Maths Activity 5



## Number and Place Value

## Bee-Bot has been struggling with his maths.

Put your maths hats on and see if you can help him to solve these questions.

1.

3.

5.

2.

4.

6.


## Record your answers and working out here.





## Reasoning

Test your knowledge and combine your mathematical skills to help solve these reasoning problems.




## Problem Solving

## You are a Maths Superstar!

Time to put your superhero cape on and apply your learning to solve these tricky problems!


## NUMBER \& PLACE VALUE

I think of a four digit number.
When rounded to the nearest 1000 my number rounds to 6000 .
When rounded to the nearest 100 my number rounds to 6300 .
When rounded to the nearest 10 my number rounds to 6350 .

What could my number be? Find all possibilities.

## ADDITION \& SUBTRACTION

Using each of the digits $2,7,4,5,1,3$, can you make an addition calculation with the answer 400?

## FRACTIONS

There are 30 children in a class.
$\frac{2}{5}$ of them are girls.
How many boys are in the class?

## MEASURES - MONEY

Kerry bought 3 presents. The cheapest present cost $£ 2.80$, the most expensive present cost twice as much and the final present was exactly halfway between the prices of the other two presents.

How much did each present cost?
How much did she spend altogether?

## More Problem Solving




## Shape Hunt!



Take a look at the 2D and 3D shapes below and discuss:
What are the names of these shapes?

- Can you name the properties of each shape? (faces, vertices, edges)



## Draw your own picture using 2D and 3D shapes




## Mini Lava Lamps

This science activity will require a few items from your kitchen and an adult to help. Many thanks to Sue Martin for this amazing kitchen science lesson.


Draw and label how you set up your experiment in the step boxes below：

| ｜Step 1 | ｜Step 2 |
| :---: | :---: |
| I | I |
| I | I |
| I | I |
| I | I |
| I | I |
| I | I |
| I | I |
| I | I |
| I | I |
| I | I |
| I | I |
| I | I |
| I | I |
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|  |  |
| I Step 3 | I Step 4 |
| ｜ | I |
| I | I |
| I | I |
| I | I |
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| I | I |
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| I | I |
| I | I |
| I | I |
| I | I |
| I | I |
|  |  |
| Results－What happened？What have you learnt from this experiment？ |  |
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## WHAT YOU DO:

1. Use the felt tip and ruler to draw a boat shape on your pizza disc. Make it as long as the disc and quite wide to help prevent the boat capsizing. Cut out the boat base.
2. Place the poster tack on the table and press a bottle lid onto it with the open side downwards. Press down with the pencil to make a small hole in the middle. Don't make the hole too big as it needs to be a tight fit on the skewer.
3. Take out the poster tack and glue the lid down towards the front of the boat base. Push the pointed end of the skewer down through the hole in the lid and into the base.
4. Cut the sheet of coloured card so that it is shorter than the skewer, and trim it to your preferred shape. You can decorate it with a felt tip pen. Punch a hole in the middle of the top and bottom, then slide the sail onto the skewer.
5. Place the boat in the water tray and blow into the sail to make it move across the water. You can customise your boat by adding a sailor, flag, decorations etc. You could try to help it move faster, for example by changing the shape of the base to make it more streamlined.


## STEM Explanation:

Gravity acts downwards on the boat, pulling it down onto the water.

The boat base is made from polystyrene foam pizza disc; this contains lots of little air pockets, making it buoyant so that it doesn't sink.

When you blow into the sail the boat moves across the water.

The resistance of the water (drag) slows the boat down.

If you make the boat more streamlined (e.g. by making the front pointed and rounding off the corners) this reduces the drag so the boat can go faster.



## Egg Parachutes



Product Code: SC10130-03-20 Made in UK

## WHAT YOU DO:

The aim is to construct a parachute to allow an egg to be dropped out of an upstairs window onto a hard surface without it breaking. Here are some suggestions:

1. Tie four or more strings near the corners or edges of the piece of thin material so that it will act as a parachute.
2. Use the hard boiled egg initially. Package it well, particularly underneath, to cushion the impact when it lands.
3. Attach the other end of the strings to the egg package or basket without getting the strings tangled up!

Ask an adult to hold the parachute by the middle, with the egg package hanging down, drop it out of an upstairs window onto hard ground (e.g. concrete). Time the descent of the egg and then check whether it has broken

Modify and improve your design as required; for example you could make a larger parachute to slow the egg down more (time the descent to see if this has increased). You could change the number of strings or re-position them to improve your parachute, and/or use more packaging underneath the egg

Once you are happy with your design, place the raw egg in the package instead of the hard boiled egg. Once it has descended, check whether the raw egg has broken.


STEM Explanation:
The egg and parachute are pulled downwards by gravity.

As they move down the air pushes against them.

The parachute is relatively large; the air resistance gives rise to an upward pull, slowing down the descent of the egg.

The egg must be packaged well to absorb and cushion the impact when it hits the ground.

To prevent the egg from breaking, you can try increasing the air resistance, cushioning the egg better, or both.


## Core Movements

Work through these stretching activities every day and fill in your fitness log. Ask your Parent or Guardian to sign off your activity.



| Day | Number of Reps | Signed |
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## Your Favourite Sport

Do you play a sport for school? Or as part of a club outside of a school? Do you watch a sport on TV or live sporting events? What is your favourite sport?



## The Olympics

The Olympics began in Ancient Greece and ran every four years from 776BC to at least 393AD. The modern Olympic Games also began in Greece in 1896, taking place in Athens.

Over 200 nations now compete in the Summer and Winter Olympic Games which are held every four years.

The Paralympic games are also held every 4 years in the same year as the Summer Olympics and have done since 1960.

The five interlocking rings in blue, yellow. Black, green and white are known as the Olympic rings and was created in 1913.

The rings represent all the colours of the flags in the world.



## Video Game Design

You have been asked to design a brand new online game suitable for boys and girls aged $7-11$. The game should have a retro theme like the video games of the 1980's and 1990's.

Your first task is to design the Protagonist of your game. As the game will follow a retro theme the hero should be designed in pixels.

|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

I Pixels are the tiny dots of coloured light that make up images when displayed on a screen, like a computer monitor.
Explain the key elements of the game; what is its name? Where is it set? What is the aim?

Design your level that the user will see when the game starts - remember to think about your target audience and what will appeal to them when creating your design.



## Video Game Design

Explain how the point system will work which causes you to win or lose the level. Use the flow chart symbols to create a flowchart which explains how the score is calculated.


Here is an example "Getting to School" flowchart to help you create your own



## Our World - Night and Day




## Continents, Countries and Oceans

World - Continents
A continent is a huge expanse of fland. The word is s sivided up into seven
continents. continents ere divided ip. int countrics.

The Darién Gap the 100 -kilometre-wide Darién Gap, and Colombia, makes travel
hard for people and goods.

Border control UK A border control is where the movement of people, animals and goods in and out of a country can be monitored. People
show their passport to get in or out. 8. Questions
Which continent do we
live on?
What would happen if
the world didn't have
any borders? 1 Match each continent those shown on the
map and say what you $\qquad$ 10」 uo!poəs e әлеч pue
Hodssed e uб! each continent, where important facts.



samıeəj pue soうejd
Key words

- Continent - International
08 Teaching Atlas
Work through the questions and challenges.





## My Family Timeline

A timeline is a listing of events in chronological order. This means that the events are shown in the order that they happened.




There are so many changes in history that influence our lives today. Timelines help us to put these events in chronological order.


We can learn a lot about the past by looking at artefacts. Historians look closely at artefacts and ask and answer questions to try and discover what it tells us about the past.



## Hisłory Activity 3

What do you this is and why?

