

Hello Year 3 children and families,

We hope you are all doing well and that you enjoyed all the work and activities we sent you last week. We have really enjoyed seeing more of your work in Seesaw and will carry on sharing the best examples with the rest of the class– so keep up the hard work and keep posting.

This week you will find details of an exciting sports day challenge in the PE section of this pack, as well as various science investigations that we hope you will be able to carry out over the next couple of weeks.

Many thanks,  
Clare, Alice, Caroline, Siobhan and Beth

### Virtual school trip of the week

This week let's walk the New York High Line park together! The High Line is a public park built on an old disused railway line elevated above the streets of New York's Manhattan. Winding through the city, amongst highrise buildings (and even through some!), the High Line opened in 2009 and visitors experience nature and artworks on display. The video is long– you may not want to watch it all but you fast forward through it. New York is a very multicultural city with many tourists, like London, and among the american voices I heard so many other different languages spoken– I wonder whether you can make them out too?

<https://viewing.nyc/video-take-this-virtual-tour-through-the-high-line-park-from-meatpacking-district-to-hudson-yards/>

This also reminds me of a lovely book called The Curious Garden, by Peter Brown. Here is a link to an online reading of it: <https://www.youtube.com/watch?v=6SHmN-wXyKU>

# English

This week we will be learning about and writing instructions.

## Lesson 1

**Warm-up activity:** Find someone to work with you, ask them to bring a jumper or sweatshirt but not put it on. You must instruct them to put on their jumper or sweatshirt, but they must do exactly what you're instructing them to do- they could imagine they're an alien from another planet and don't know what a jumper is and have never put one on before!

How was it? It was probably not as easy as you might think and hopefully that exercise has taught you some important points when it comes to instructions.

## Task

Take a look at the following sets of instructions and see if you can come up with a list of the features of instructions- in other words, what do instructions need to include or what do all these sets of instructions have in common? This list will become our success criteria when we come to write our own instructions.

### Paper Plate Fish





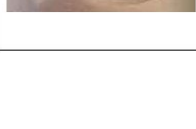
This should take about 15 minutes

#### You will need:

- White paper plate or round white card
- Scissors
- Glue
- Colouring pens/pencils



#### Method:

	1. Use a ruler and a pencil to draw a triangle on a paper plate.
	2. Cut out a triangle with some scissors.
	3. Stick the triangle onto the edge of the plate using some glue, to make a fish shape.
	4. Draw some wiggly scales and an eye on the fish, using a black felt tip pen.
	5. Decorate the rest of the fish with bright colours.

#### Making a cup of tea

##### *You will need...*

- A mug or cup
- Water
- Kettle
- Milk
- Tea bag
- Sugar
- Teaspoon



##### *What you will need to do...*

- First, fill the kettle with enough water to fill your mug or cup.
- Next, switch the kettle on and wait for your water to boil and place a tea bag into your cup or mug.
- Once the water has boiled, pour it carefully into your mug or cup, leaving a little bit of room at the top and leave to brew for 1 minute.
- Then lift the teabag out of the water with the spoon and squeeze it against the side of the mug to get all of the water out before putting it in the bin or compost.
- Depending how you like it you may add one or two teaspoons of sugar to the mug.
- After, pour in a small amount of milk to the mug or cup if desired.
- Finally, stir with the spoon and it is ready to enjoy!

## Table Football








This should take about 30 minutes

### You will need:

- Large piece of card
- Green felt (same size as your piece of card)
- Glue or sticky tape
- 2 white margarine tubs
- White tape
- Piece of newspaper
- White paint
- Straw



### + Method:

	Firstly, get a large piece of card.
	Then cut some green felt so that it is the same size as the card and stick it on top. This is your football pitch.
	After, cut out one side of each margarine tub.
	Next, stick them on each side of your football pitch using glue or sticky tape. These will be the goals.
	Then stick white tape to the felt for the markings of the football pitch.
	Finally, scrunch up a piece of newspaper or other scrap paper into a tight ball. This will be your football.
	To play blow through a straw to move the ball around and see how many goals you can score!

### How to make cheese on toast

#### You will need:

- 2 slices of white bread
- grated cheese
- oven gloves

#### Optional:

- black pepper
- tomato or brown sauce

#### What you do:

**Remember** the grill gets hot so always use oven gloves and have an adult to help you.

1. Preheat the grill.
2. Place two slices of bread on a grill tray.
3. Grill the upper surface of the bread until it turns golden brown.
4. Carefully remove the bread from the grill and place on a plate, brown side down.
5. Cover the un-grilled surface with the grated cheese.
6. Place the toast back on the grill tray and put it under the grill and cook until the cheese begins to bubble.
7. Using the oven gloves, take the grill pan out and put the toast on a plate.
8. Turn off the grill.

You can improve the flavour by adding pepper or sauce.

### Investigating insulating materials

#### *Equipment*

- Two beakers
- Hot water
- Cotton wool
- Aluminium foil
- Thermometer
- Pen
- Paper



#### *Method*

- Wrap the outside of one beaker with aluminium foil.
- Cover the outside of the second beaker with cotton wool.
- Heat 400ml of hot water in a kettle.
- Pour half of the hot water in to one beaker and the other half into the second beaker.
- Check the temperature of the water in each beaker and write it down.
- Leave the beakers for 5 minutes
- Record the temperatures of the water in each beaker and write it down.
- Leave the beakers for another 5 minutes.
- Record the temperatures of the water in each beaker and write it down.
- Look at the results and decide which material kept the water the hottest (insulated the water).

Hopefully you noticed that the instructions mostly all included the following features to make them useful and effective instructions:

- A title
- Materials needed/ingredients
- Chronological order (the order in which you must do things)
- Time conjunctions or numbered steps
- Imperative verbs (bossy verbs)
- Photos
- Headings or subheadings



## Lesson 2 (watch the video on Seesaw)

One of the features of instructional writing is the order of the instructions– they must be in **chronological order**, in other words the order in which they must be followed. As you saw from the video, instructions are useless if they're out of order.

Task 1: Cut out these jumbled up parts to a set of instructions and put them in the correct order:

Finally dry your mouth completely with the towel.	<p><u>How to clean your teeth</u></p> <p>Next brush the toothpaste all over your teeth.</p> <p>What you do:</p> <p>Then turn on the tap and wet the toothbrush.</p> <p>What you need:</p> <p>First, squeeze a small amount of toothpaste onto the brush.</p>
Then quickly rinse your mouth with water.	
A tube of toothpaste	
A toothbrush	
Water	
A towel	
After that rinse the toothbrush under the tap.	
Keep brushing carefully for two minutes.	

Task 2: Some instructions rely on numbering the steps, others use **conjunctions of time** to make the order clear, while some instructions use both.

a/ Here are some hand actions to express the time conjunctions you are most likely to need to use in your own set of instructions:



**Then** doesn't  
have an action -  
perhaps you could  
make up your own?

Have a go at retelling your usual morning or bedtime routine using the words and the actions as you speak. Perhaps you'll share this with us on seesaw?

b/ Time conjunctions can also link ideas within a sentence- can you link the two parts of the sentences together?

Tom was good at apologising...

...as soon as he bit into his peanut  
butter sandwich.

That evening, Mum would not let Tom  
watch any television...

...until he tidied up.

Tom knew that his mum  
would be cross...

...after Tom had left for school.

Mum took a deep breath...

...whenever he made a mistake.

Tom remembered how much he  
loved his mum...

...when she discovered he  
had left a mess.

Mum found the note...

...before Tom walked through the door.

**Lesson 3** So we've looked at the need for instructions to be in chronological order and how they use numbered steps and conjunctions of time. Today we're going to be looking at the **verbs** in instructions.

Task 1: What's a verb?

A verb is a 'doing' word, an action. Usually you can act out a verb.

Verb Challenge! Find all the verbs you can!					
have	colour	straight	look	strong	cube
chew	air	square	easy	pink	table
tooth	hair	say	date	blonde	box
long	salt	alone	circle	sweet	work
bored	burger	orange	enjoy	heart	cry
sky	in	clock	earring	hear	day
sleep	make	run	long	hat	take
huge	watch	funny	dark	nail	talk
short	floor	weak	screen	tall	break
eye	sour	do	shirt	eat	white

Task 2: What's an imperative verb?

Imperative verbs, sometimes called 'bossy verbs' are verbs that tell someone to do something. They are usually at the start of a sentence and turn that sentence into a command.

For example: "**Throw** the ball to another person"

"**Stop** what you are doing"

"**Colour** within the lines!"

Write a sentence  
these imperative verbs.

starting with each of

For example:

**Take** the dirty plates from the table and put them in the dishwasher.

Extra challenge: Can you add an adverb to describe how to carry out the action?

For example:

**Carefully take** the dirty plates from the table and put them in the dishwasher. Or remember you can move the adverb around in the sentence: **Take** the dirty plates from the table **carefully** and put them in the dishwasher.

take
put
mix
pour
bring

place
make
sprinkle
look
measure



## Lesson 4 (Watch the video on seesaw)

Here is the script of the directions that go with the video on Seesaw. Watch the video to help you understand how important it is to be clear and concise with your instructions and to avoid including unnecessary detail.

**Task: Rewrite the directions from the train station to the hotel in a few simple steps.**

Directions from the train station to your hotel

When you get off your train, you may notice that it is busy and crowded in the station, and there are various shops and kiosks in the train station lobby, as well as a waiting area with air conditioning, which is lovely in the summer when it gets really hot. So once you have left the station by the main exit and turned right you will cross the road- taking care to use the pedestrian crossing, waiting for the green man and beeping sound to tell you it is safe. Ahead of you there will be a massive cinema where there are always lots of people queuing to buy tickets at the box office, or even getting drinks to enjoy at the tables set out on the pavement in front. You will need to go into the park using the gate to the left of the cinema and there you will notice many people walking their dogs and children on scooters. My favourite dogs are Chihuahuas, I just love how small they are and they always have big cute eyes, although some people say they are too tiny and they always yap loudly- they prefer bigger dogs. At the opposite end of the park, there is a beautiful big tree which in the springtime is covered in pink blossom and which has few benches around it where you can sit and enjoy the view of the park. Next to the big tree is an exit with big gates, which I once saw a child climbing up, he got very high up before his adult told him to get down, and just opposite is the hotel.

## Lesson 5

Today we would like you to write your own set of instructions. You can write instructions for whatever you would like, however you must follow the success criteria below, regardless of what the instructions are for.

You could choose to write a favourite recipe, a craft activity, a set of instructions for playing your favourite game, how to carry out a job or chore around the home, how to get from your house to the local park or to school or perhaps how to fix a bicycle puncture or look after a pet- there are many different possibilities and it is up to you to choose.

How you want to present your instructions is also for you to decide . Write them up, type them up or perhaps you fancy yourself as the next big TV chef and will be making an instructional video. People even make instructional videos of how to clean or fix things and post them online. But do remember that if you're doing a video then your script must still follow the success criteria below.

### Instructions

#### Your instructions must:

- be in chronological order (the order in which you must do things)
- use time conjunctions or numbered steps
- use imperative verbs
- be clear and concise
- have a title
- list the materials needed/ingredients

#### Your instructions may:

- include photos or diagrams
- have headings or subheadings

# Reading

Please continue to make use of the books and quizzes on Rising Stars



## Fossils

Fossils are preserved remains of animals and plants that lived millions of years ago made in sedimentary rock. Usually when something dies it is eaten or decays and therefore disappears. However, when an animal or plant dies it can get covered over with mud or sand, it can stay there and over a long time, become a fossil.

### Dinosaurs

Fossils are essential to understanding about life a long time ago. Without them we would not even know that dinosaurs existed! People who study fossils are called palaeontologists and these are the people who have found out what we now know about dinosaurs. However, this only started 200 years ago, so we've only known about dinosaurs for 200 years!



### Did you know?

- 'Sue' is the nickname given to most complete and best preserved Tyrannosaurus Rex specimen ever found.
- The word 'fossil' comes from an old word 'fossilis', meaning 'dug up'.
- Fossils are only found in sedimentary rock.
- The fossils in the pictures are called ammonites. It is the town symbol for Whitby in North Yorkshire. Whitby is good for fossil hunting and long ago, people thought that the ammonites were snakes turned to stone by St. Hilda!

### How a Fossil is Made

When a plant or animal dies, their body sinks into mud or is buried by sand. This usually happens on the sea bed. Being buried preserves it from rotting or being eaten by other animals. Whilst it is underground, water and minerals seep into the bones and where the bones and body used to be and make a hard shape. This is squashed under more layers of sand, mud and eventually rock over many, many millions of years. Much later, palaeontologists or fossil hunters may find it as the rock in which it is encased becomes unearthed.

1. What does a palaeontologist study?

2. What is the nickname of the best preserved Tyrannosaurus Rex skeleton?
3. Why do you think fossils are never found in igneous rock?
4. Why do you think that the people of Whitby thought that the ammonites were snakes turned to stone by St. Hilda?
5. Why have we only got fossils to find out about dinosaurs?
6. What does the Latin word 'fossilis' mean?
7. How come the fossilised animals or plants haven't been eaten by other animals?
8. Why did the author use an exclamation mark at the end of the Fossil Facts section?
9. Why aren't there any fossils of cats that lived twenty years ago?

## Spelling

Look and say	Look, say and write	Cover and write	Check and write again
continue			
decide			
describe			
different			
difficult			

Fill in the missing word.

1. I want to \_\_\_\_\_ playing the drums.
2. I am trying to \_\_\_\_\_ what the bike looks like.
3. When will you \_\_\_\_\_ if you want to go to the park?
4. This test is not too \_\_\_\_\_ .
5. Is there a \_\_\_\_\_ flavour of ice-cream?

Write your own sentences using:

1. continue
2. decide
3. describe
4. different
5. difficult



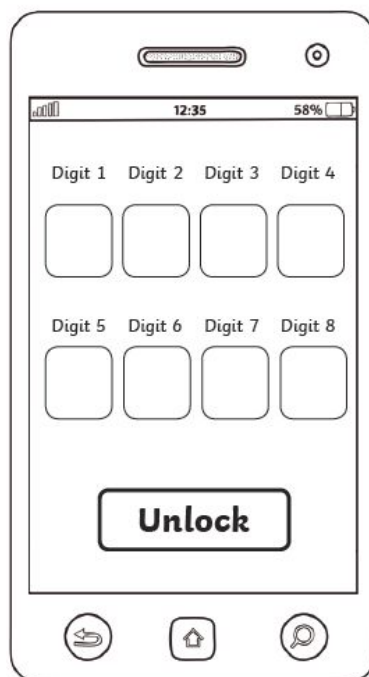
# Maths

## Lesson 1: (Watch the video on Seesaw)

# Lost in the Autumn Forest


Write the digits on this answer sheet as you crack the clues.

Once you have discovered the number for the phone, check it with your teacher to see if you can unlock the phone and escape the forest!



## Clue 1


Work out the numbers that the hedgehogs are hiding in these number sequences.

4		12	16	20	24	28	32
---	---	----	----	----	----	----	----

50	100	150		250	300	350	400
----	-----	-----	---	-----	-----	-----	-----


500		400	350	300	250	200	150
-----	---	-----	-----	-----	-----	-----	-----

8	16	24		40	48	56	64
---	----	----	---	----	----	----	----

100	200	300	400	500	600		800
-----	-----	-----	-----	-----	-----	---	-----

16	20	24	28		36	40	44
----	----	----	----	--	----	----	----

48	44	40	36		28	24	20
----	----	----	----	---	----	----	----

80	72		56	48	40	32	24
----	----	---	----	----	----	----	----











Which **hedgehog number** occurs the most frequently?

Find the **digit sum** of this number (in other words add together the 2 digits of the number).

This is the **first** digit you need to unlock the phone and escape the forest.



## Clue 2

									
2	4	8	6	1	0	5	9	3	7

Are these statements true or false?



If there are more **true** statements, then the **second** digit needed to escape the forest is: **1**









If there are more **false** statements, then the **second** digit needed to escape the forest is: **8**

## Clue 3

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>I</b>	<b>J</b>	<b>K</b>	<b>L</b>	<b>M</b>
3	4	5	6	7	8	9	10	12	15	16	18	20
<b>N</b>	<b>O</b>	<b>P</b>	<b>Q</b>	<b>R</b>	<b>S</b>	<b>T</b>	<b>U</b>	<b>V</b>	<b>W</b>	<b>X</b>	<b>Y</b>	<b>Z</b>
21	24	27	28	30	33	40	48	56	64	72	80	96

Calculation	Answer	Letter	Calculation	Answer	Letter
$11 \times 3$			$48 \div 4$		
$56 \div 8$			$7 \times 4$		
$6 \times 8$			$10 \times 3$		
$10 \times 3$			$6 \times 3$		

Use the code breaker to reveal a mixed-up autumn word. Find the matching object card to reveal the **third** digit needed to unlock the phone and escape the forest.

	firework <b>2</b>		hedgehog <b>3</b>		conker <b>8</b>		squirrel <b>7</b>
	pumpkin <b>4</b>		bonfire <b>6</b>		tractor <b>1</b>		acorn <b>5</b>

### Clue 4

Solve the number puzzle by using inverse operations.

I collect some conkers in the forest.  
 I multiply the number of conkers I have by 3.  
 I then subtract 12,  
 and divide by 2.  
 I end with the number 84.  
 How many conkers did I collect?

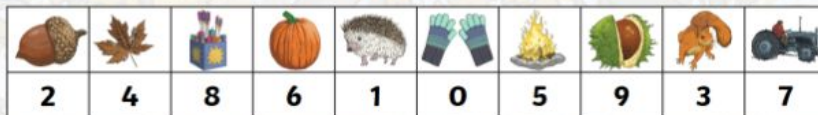


Find the digit sum of this answer (in other words, add together the 2 digits of the number you find).

This is the **fourth** digit of the number you need to unlock the phone and escape the forest.

**Lesson 2:** Today you'll finish cracking the code, and hopefully escape the forest:

### Clue 5



Calculate the answers to these addition and subtraction calculations.

Click on a  to reveal the answer.

+ =   
 - =   
 - =

871	897	885	871	898
885	872	884	872	884
897	871	871	885	898
885	898	884	871	872
897	885	897	885	884

Colour the answers in on the mosaic.  
 The picture will reveal the **fifth** digit you need to unlock the phone and escape the forest.

### Clue 6



Count how many bonfires there are.

Find  $\frac{1}{5}$  of this number.

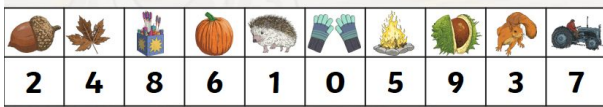
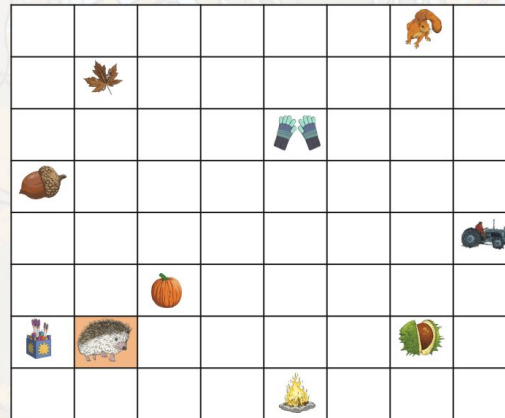
This is the **sixth** digit you need to escape the forest.

## Clue 7

Follow the hedgehog's directions. Which autumn object does the hedgehog finish on?

1. 3 squares right
2. 4 squares up
3. 2 squares left
4. 3 squares down
5. 5 squares right
6. 1 square up

This is the **seventh** digit you need to unlock the phone and escape the forest.

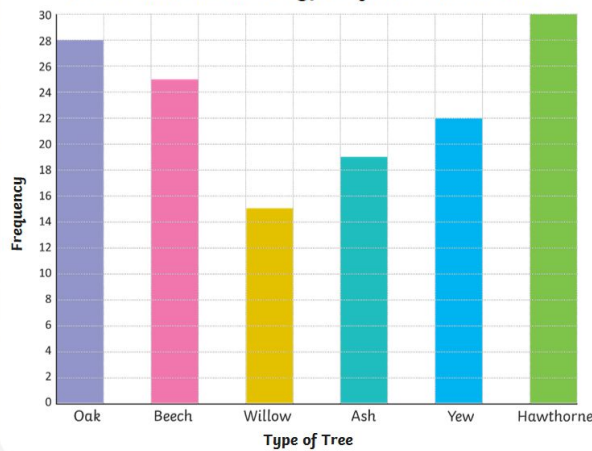


## Clue 8

How many fewer ash trees are there than beech trees?

This is the **eighth** digit you need to unlock the phone and escape the forest.

A Bar Chart to Show Types of Trees in the Forest



Remember that once you think you've worked out each digit and filled them in on the answer phone template– check your answers at the end of this pack...did you manage to escape or are you stuck in the forest forever?!?

### Lesson 3: (watch the video on seesaw)

#### Tasks

1/ Cut out and match the purple sequence cards to the correct green rule card:

My rule is -10	My rule is -100	My rule is -5	85, 80, 75, 70, 65, 60	39, 36, 33, 30, 27, 24	72, 60, 48, 36, 24, 12
My rule is -3	My rule is -12	My rule is -2	468, 466, 464, 462, 460, 458	36, 30, 24, 18, 12, 6	280, 260, 240, 220, 200, 180
42, 35, 28, 21, 14, 7	175, 160, 145, 130, 115, 100	My rule is +5	My rule is -6	My rule is -20	
My rule is +100	My rule is +3	My rule is +12	My rule is -7	My rule is -15	
My rule is +10	My rule is +2	My rule is +6	30, 36, 42, 48, 54, 60	2, 22, 42, 62, 82, 102	107, 114, 121, 128, 135, 142
My rule is +20	My rule is +7	My rule is +15	10, 25, 40, 55, 70, 85	76, 66, 56, 46, 36, 26	750, 650, 550, 450, 350, 250



**2/**

Work out what the number pattern rule is for each of these patterns. The pattern might be increasing (addition +) or decreasing (subtraction -).

Use the rule to help you complete the number patterns.

14, 18, 22, \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ Rule: \_\_\_\_\_

28, 26, 24, \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ Rule: \_\_\_\_\_

65, \_\_\_\_\_ , 75, 80, \_\_\_\_\_ , \_\_\_\_\_ Rule: \_\_\_\_\_

150, 145, \_\_\_\_\_ , 135, \_\_\_\_\_ , \_\_\_\_\_ Rule: \_\_\_\_\_

36, 30, 24, \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ Rule: \_\_\_\_\_

90, \_\_\_\_\_ , 96, 99, \_\_\_\_\_ , \_\_\_\_\_ Rule: \_\_\_\_\_

201, 211, 221, \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ Rule: \_\_\_\_\_

77, 66, 55, \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ Rule: \_\_\_\_\_

**3/**

Start at 20 and create a number pattern using addition and/or subtraction.

Your pattern must be at least eight numbers long.

My number pattern rule is: \_\_\_\_\_

**4/**























Robyn created a number pattern using addition and/or subtraction.

Her pattern finished at the number 65.

What could her pattern rule have been?



Lesson 4: Working with Money- recap

<p><b>5a. Match the notes and coins to the correct amounts.</b></p> <p>A.  £11 and 55p</p> <p>B.  £20 and 22p</p> <p>C.  £3 and 15p</p> <p> VF</p>	<p><b>5b. Match the notes and coins to the correct amounts.</b></p> <p>A.  £20 and 65p</p> <p>B.  £11 and 2p</p> <p>C.  £7 and 5p</p> <p> VF</p>
<p><b>6a. Identify the total of the coins below.</b></p> <p>_____ and _____</p> <p></p> <p> VF</p>	<p><b>6b. Identify the total of the coins below.</b></p> <p>_____ and _____</p> <p></p> <p> VF</p>
<p><b>7a. Which has the greatest value?</b></p> <p>A. </p> <p>B. £7 and 90p</p> <p>C. £7 and 89p</p> <p> VF</p>	<p><b>7b. Which has the greatest value?</b></p> <p>A. £3 and 76p</p> <p>B. </p> <p>C. £8 and 98p</p> <p> VF</p>
<p><b>8a. Tick the odd one out.</b></p> <p>A.  £9 and 81p</p> <p>B. </p> <p>C.  £9 and 91p</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p> VF</p>	<p><b>8b. Tick the odd one out.</b></p> <p>A. £7 and 32p</p> <p>B. £9 and 32p</p> <p>C. </p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p> VF</p>

# At the Beach Café

Use the Beach Café menu to work out how much each customer has spent.



Menu			
Cola.....	65p	Small chips.....	£1.50
Lemonade.....	60p	Large chips.....	£2.10
Tea.....	80p	Ice cream.....	£1.20
Coffee.....	£1	Pizza.....	£3.00
Ham sandwich..	£2.20		

### Table 1

Cola.....

Ice cream.....

Total.....

### Table 2

Tea.....

Coffee.....

Pizza.....

Ham sandwich..

Total.....

### Table 3

2 × Tea.....

Large chips.....

Total.....

### Table 4

2 × Lemonade .....

Coffee.....

2 × Ice cream.....

Small chips.....

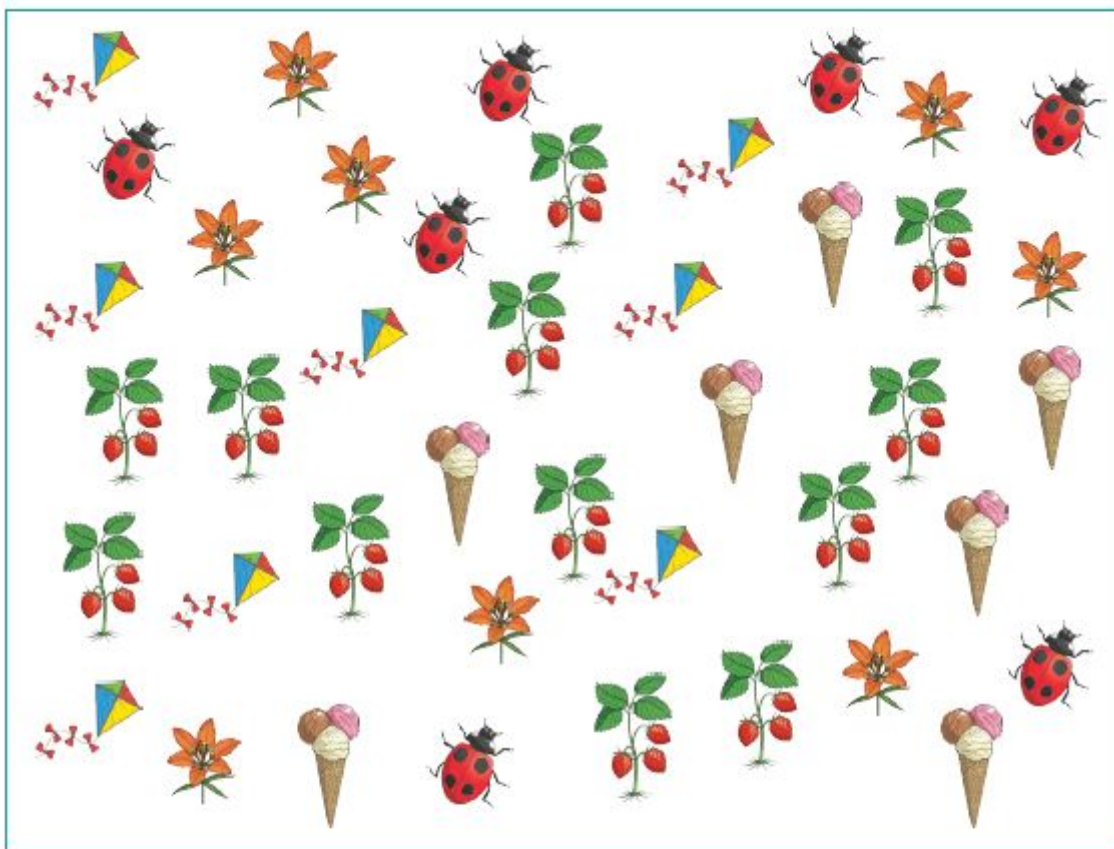
Total.....








## Lesson 5: Recapping multiplication

# Summertime I Spy and Calculations

Count the summer-themed objects and then solve the calculations.



	Number of flowers:	Number of petals on each flower:	Number of petals in total:
	Number of ladybirds:	Number of spots on each ladybird:	Number of spots in total:
	Number of strawberry plants:	Number of strawberries on each plant:	Number of strawberries in total:
	Number of kites:	Number of bows on each kite:	Number of bows in total:
	Number of ice creams:	Number of scoops in each ice cream:	Number of scoops in total:

# Multiplication and Division Facts

## Summer Mosaic

Solve the calculations to reveal the hidden picture. Each answer has a special colour.

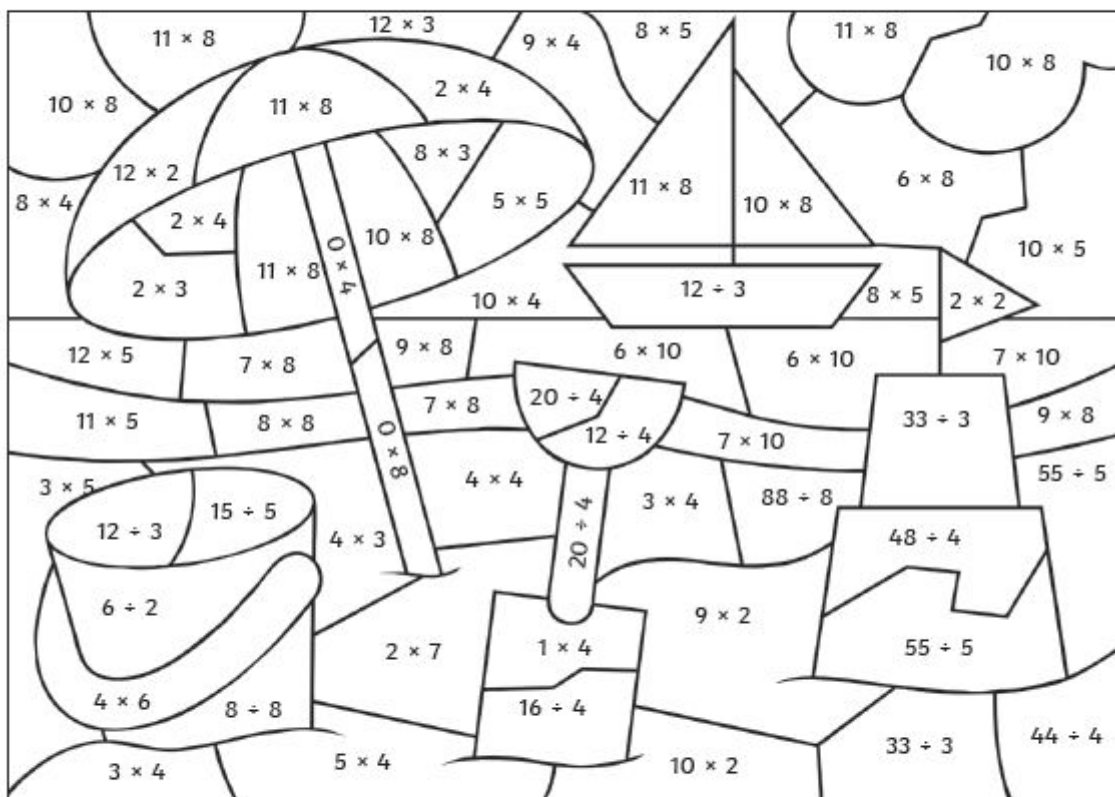
yellow = 1 - 6 | blue = 7 - 18 | red = 19 - 39 | green = 40 - 65 | black = 66 - 96

$72 \div 8$	$33 \div 3$	$27 \div 3$	$80 \div 8$	$4 \times 3$	$36 \div 3$	$80 \div 8$	$21 \div 3$	$36 \div 4$	$24 \div 3$	$1 \times 8$
$30 \div 3$	$36 \div 3$	$10 \times 8$	$12 \times 8$	$24 \div 3$	$21 \div 3$	$8 \times 8$	$11 \times 4$	$12 \times 4$	$6 \times 8$	$10 \times 4$
$44 \div 4$	$9 \times 8$	$1 \times 8$	$36 \div 4$	$10 \times 8$	$33 \div 3$	$6 \times 8$	$32 \div 4$	$3 \times 4$	$72 \div 8$	$10 \times 4$
$11 \times 8$	$27 \div 3$	$72 \div 8$	$24 \div 3$	$21 \div 3$	$11 \times 8$	$11 \times 4$	$5 \times 8$	$6 \times 8$	$8 \times 8$	$7 \times 8$
$12 \times 8$	$3 \times 3$	$21 \div 3$	$36 \div 3$	$4 \times 3$	$9 \times 8$	$36 \div 4$	$64 \div 8$	$12 \times 4$	$30 \div 3$	$56 \div 8$
$7 \times 4$	$4 \times 8$	$8 \times 3$	$4 \times 4$	$3 \times 8$	$9 \times 3$	$33 \div 3$	$28 \div 4$	$5 \times 8$	$72 \div 8$	$44 \div 4$
$2 \times 8$	$7 \times 3$	$11 \times 3$	$9 \times 3$	$12 \times 3$	$36 \div 4$	$27 \div 3$	$8 \div 1$	$11 \times 4$	$21 \div 3$	$1 \times 8$
$12 \div 3$	$12 \times 3$	$8 \times 4$	$11 \times 3$	$6 \times 4$	$40 \div 8$	$12 \times 4$	$8 \times 1$	$5 \times 8$	$7 \times 8$	$11 \times 4$
$4 \div 4$	$4 \times 8$	$8 \times 3$	$3 \times 8$	$3 \times 8$	$24 \div 8$	$5 \times 8$	$10 \times 4$	$6 \times 8$	$12 \times 4$	$5 \times 8$
$1 \times 4$	$7 \times 3$	$9 \times 4$	$12 \times 3$	$10 \times 3$	$8 \div 8$	$12 \div 4$	$11 \times 4$	$7 \times 8$	$8 \times 8$	$48 \div 8$
$2 \times 3$	$48 \div 8$	$20 \div 4$	$3 \div 3$	$16 \div 8$	$16 \div 4$	$15 \div 3$	$20 \div 4$	$32 \div 8$	$1 \times 4$	$20 \div 4$



# Summertime Colour by Calculations

Use the key to colour the summer-themed picture.



Grey:	Red:	Orange:	Yellow:	Green:	Light Blue:	Dark Blue:	White:
0	1 - 5	6 - 10	11 - 20	21 - 30	31 - 50	51 - 79	80 - 100

**Extra challenge:** These daily maths lessons are well explained and lots of fun and I'm sure you'll enjoy taking part. A new one is uploaded each day or you can catch up on ones from previous days:

<http://www.iseemaths.com/home-lessons/>



# Topic

Read the information to find out about the final two UK land formations to add on to your outline map of the UK.



## Worm's Head



Worm's Head is a unique place, and one of the most fascinating features of this beautiful area of Wales.

Named 'Wurm' meaning 'dragon' by Viking invaders, Worm's Head is shaped like a giant sea-serpent and marks the most westerly tip of Gower, Swansea, Wales.

The island is joined to the land by a rocky causeway (a walkway) and has a large flat-topped 'Inner Head'. It also has a natural rock bridge called 'Devil's Bridge'.

The headland is one mile long and the highest point is approximately 45 metres high.



# Giants Causeway



The Giant's Causeway is a natural rock formation located on the northeast coast of Northern Ireland, in the county of Antrim.

It is made of 40,000 hexagonal columns made of basalt. It formed during an intense period of volcanic activity, when rapidly cooling lava contracted and differences in the cooling rate led to the unusual formation.

The columns form huge stepping stones, some as high as 12 meters, which slope down towards the sea.

### The Legend

A local legend says that the Giant's Causeway was built by Finn McCool, a magical giant. One of the rock formations resembles a giant's boot.

Finn supposedly built the causeway so that he could reach Scotland without getting his feet wet. There is a similar rock formation 75 miles away across the sea, at Fingal's Cave, in Scotland.



Once you have added these onto your outline map of the UK you will have a fantastic map of the most impressive, interesting and beautiful natural land formations that exist in the United Kingdom...i wonder whether this has inspired you to visit them one day!

Remember to share your work with us on Seesaw



# Science

Here are 5 science experiments that you can carry out to gain a better understanding of soil. Pick and choose over the next couple weeks which you might manage to carry out. We do understand that these investigations may not be possible given your individual circumstances but wanted to offer some ideas for those of you able and wanting to challenge your children to use their investigative skills.

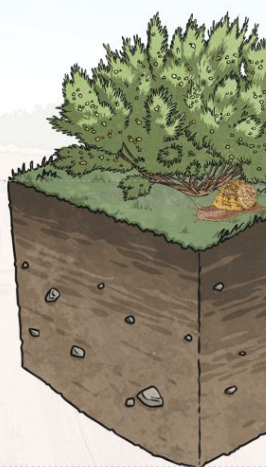
## Do You Think There Is Only One Type of Soil?

There are different types of soils. Soils can be different because it depends on:

- the type of rock they were made from;
- the plants, animals or other organisms that live in or near them.

### Did You Know?

Even soils that feel dry have water in them. It's just that the water is not available for plants to use.



## Soil Senses

Collect some soil from different places and use your senses to examine it.

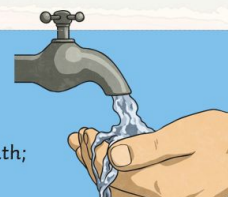
Explain what you can:

- **see** - use a magnifying glass or sieve;
- **feel** - use your fingers;
- **hear** - rub the soil onto paper or between fingers.

### Remember to be safe around soil.

It is important to:

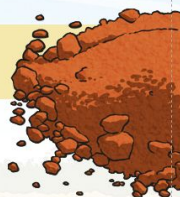
- always wear gloves;
- always wash your hands;
- keep the soil away from your nose and mouth;
- not smell or taste the soil.



## Classifying Soil by Colour

### Did You Know?

You can tell a lot about soil by just looking at its colour.



### Black or Dark Brown

This soil can usually grow plants easily and is fertile.

### Plain Brown or Yellow

This soil has a low level of nutrients and organic matter making it more difficult to grow plants. It is not very fertile and mulch or compost would need to be added to make it more fertile.

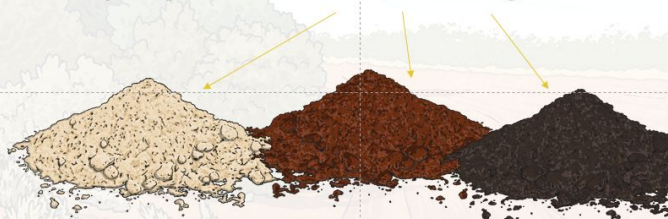
### Red

The red colour is because oxygen reacts with the minerals, such as iron, which can make the soil look a reddish, 'rusty' colour. This soil has been exposed to the weather for a long time and will drain water well. To help plants grow, this soil must have nutrients and organic matter added to it.



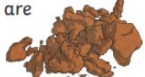
## Classifying Soil by Texture

Another easy way to classify soil is by its texture. Soil texture means how coarse or fine a soil is.




This means finding out how much **sand**, **silt** and **clay** it contains.



You can find out soil texture by using the **ribbining technique**.

<p><b>Sandy</b> Like the name suggests, sandy soil is mostly made up of, wait for it... sand! Because of the fine grains, water drains well through this soil and since it stays pretty dry, you can easily get the fork through it. Of course, that means any plants growing here will need to be well watered. A fertiliser should also be used to top up the nutrients that are so easily swept away.</p> 	<p><b>Loam</b> Mix, mix, mix! Loam soils are a good mixture of sand, silt and clay. This soil holds on to most of its nutrients and keeps enough water to help plants get what they need. It also drains enough to avoid waterlogging. This makes loam soil an allotment's best friend when it comes to growing crops all year round!</p> 	<p><b>Clay</b> The trickiest of all to work with, clay based soils are known for being cloddy thanks to their ability to hold on to water. Of course, this in means they can become waterlogged and muddy all too easily – a gardening nuisance. On the upside, clay soils also hold on well to nutrients so fewer artificial fertilisers are needed to support crop growth.</p> 
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## Types of Soil

<p><b>Silt</b> With medium sized particles, silt soils hold on to enough water to allow for good plant growth while draining enough to avoid waterlogging. The particles allow silt soil to compress (squash down) very easily, making it difficult to dig, plant and de-weed. On a positive note, it tends to maintain enough nutrients to make it fertile, supporting crop growth.</p> 	<p><b>Chalk</b> As you might expect, chalk based soils contain a lot of calcium carbonate (chalk). It can be challenging to grow some plants in these types of soils as many plants prefer to grow in more acidic conditions (think vinegar!). Water drains quickly through chalk soil so plants cannot get enough moisture.</p> 	<p><b>Peat</b> What happens when moss, shrubs and grasses die? They form peat! Very rarely found naturally in an allotment plot, peat is generally formed near bogs and marshlands. Here plants do not fully decay, leaving the matter that's left extremely high in nutrients. Gardeners often choose to buy peat and add it to their existing soil to improve its fertility.</p> 
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## Ribbon test

### Ribbon Test

#### Method:

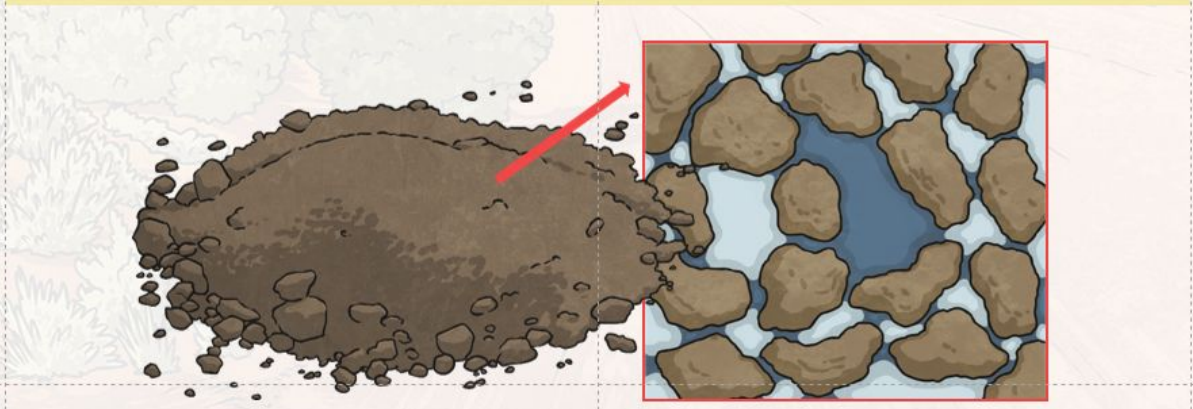
- Get soil samples from different parts of your garden or school surroundings. A small handful of soil should be enough.
- Take out any leaves, stones or sticks.
- Slowly add water to the soil. If it gets too wet, add some more soil.
- Roll the soil into a ball. Feel the ball with your fingers to find out if it is gritty (sand), silky (silt) or plastic/sticky (clay). If it starts to fall apart and you cannot make a ball, the soil is very sandy.
- Next, roll the ball between your hands to start making a ribbon. If the ribbon starts to fall apart, you have sandy loam.
- If you can create a short ribbon before it starts falling apart, then the soil is another type of loam.
- If you can make a long ribbon, then there is definitely clay in the soil.



**Did You Know?**

The best soil texture for growing plants is loam, which is a mixture of clay, silt and sand.

Usually the more clay and silt in the soil, the more water the soil can hold. This is because the silt and clay are made up of smaller particles than sand. Sandy soil holds lots of air; clay soil holds a lot of water, but has no much room for air.



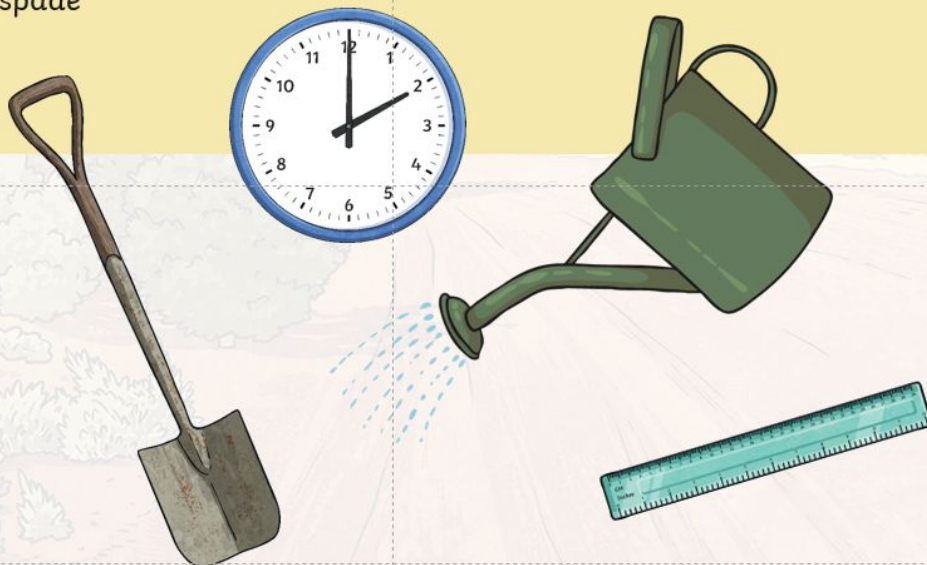
## Soil Drainage Test

### Soil Drainage Test

#### Drainage Test (Percolation Test)

**You Will Need:**

shovel or spade  
clock  
water  
ruler

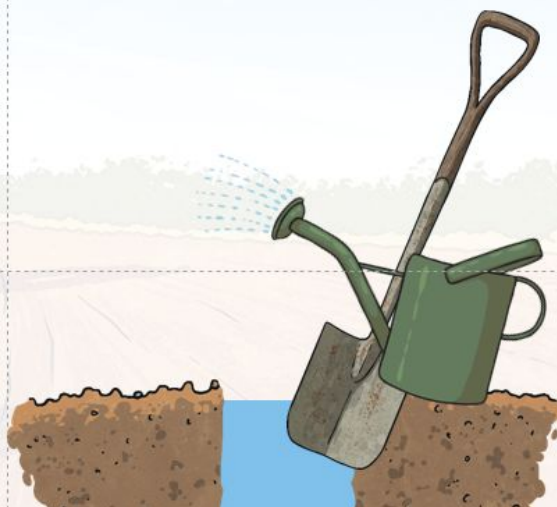


# Soil Drainage Test

## Drainage Test (Percolation Test)

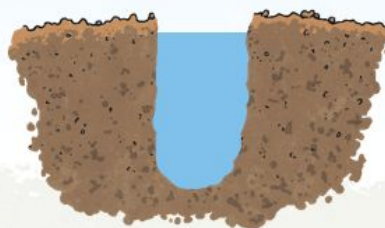
### Method:

- Dig a hole about 40cm deep and at least 15cm wide in the soil you want to test.
- Fill the hole up with water and leave it to drain overnight.
- Fill the hole with water again. This time carefully watch how fast the water drains.



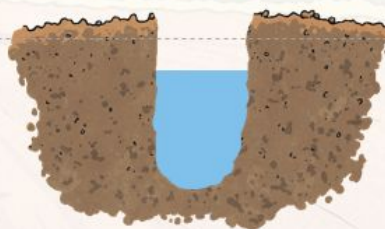
### Poorly-drained

Water level does not drop and stays the same for longer than an hour.



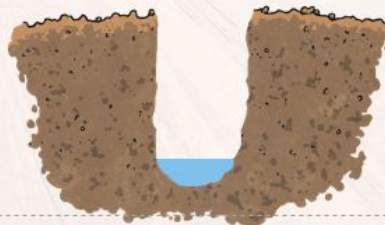
### Moderately well-drained

After about an hour the water level drops by a couple of centimeters.



### Very well-drained

Drains within a few minutes.





## Create a mini compost-bin

### Compost

Compost is organic matter that has been decomposed so that it can be recycled as natural fertiliser.

Many people choose to have a compost bin at home as they see it as more environmentally friendly to recycle waste food rather than throw it away.

It also means they can create their own fertiliser for soil in their garden or for plants, rather than buying it. You will now have a go at creating your own mini compost bin complete with worms!



### Health and Safety





Make sure you handle all waste materials with **plastic gloves** as all food waste contains **bacteria** that could make you feel ill.

Just because **worms** don't cry or scream when they are in **pain** does not mean they don't feel it. Handle them gently and carefully.




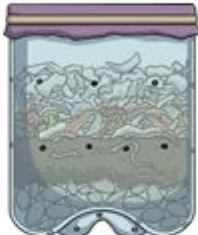

## Creating a Mini Compost Bin

Follow each step of the instructions carefully to create your mini compost bin.

<b>Required:</b>	small stones
Scissors	compost
Plastic gloves	water
Thin piece of fabric	waste food
Elastic band	shredded paper
Card / cardboard	worms

Step	Instructions	Diagram
Step 1	Carefully cut your plastic bottle in half horizontally. Punch small holes in the sides and bottom of the bottle.	
Step 2	Place small stones as the first layer.	
Step 3	Add a layer of compost.	
Step 4	Add a small amount of water so that the compost is moist but not completely wet.	



Step 5	<p><b>Health and Safety: Wear plastic gloves to handle the worms. Ensure that worms are handled gently.</b></p> <p>Place a few worms gently onto the compost.</p>	
Step 6	<p><b>Health and Safety: Wear plastic gloves while adding waste food.</b></p> <p>Place a handful of scraps on top of the worms. Leave it placed gently on the worms; it will fall further by itself so there is no need to push it down.</p>	
Step 7	<p>Wet the shredded paper and add as the topmost layer of your mini compost bin.</p>	
Step 8	<p>Add a thin piece of fabric over the top of the plastic bottle and secure it with an elastic band.</p>	
Step 9	<p>Attach long rectangular pieces of card around the bottle so that it makes it dark for the worms. They live in the dark and do not like bright lights.</p>	

## Understand soil erosion

**SOILS CAN BE WORN AWAY!**

**Soil Erosion by Water** Water and wind can cause soil erosion and transport large amounts of soil. Even though it is a natural process, human activities can accelerate this process, causing serious soil degradation. Depending on different soil properties, such as texture (particle size distribution) and soil organic matter content, soils can be more or less resistant to erosion. Experiment with soils from three different land uses to discover how strong soil erosion can be!

**1** CUT THREE PLASTIC BOTTLES HORIZONTALLY. USE THE BIGGER PART.

**2** WEIGH 1 KG EACH OF SOILS AND PUT IT IN THE CUT PLASTIC BOTTLES.

**3** SET THREE BEAKERS BENEATH THE PLASTIC BOTTLES TO CATCH THE WATER.

**4** POUR 100 ML OF WATER SLOWLY INTO EACH BOTTLE, KEEPING THE BOTTLE TILTED. CARRY OUT THIS STEP TEN TIMES CONSECUTIVELY.

**5** COMPARE THE CLEARNESS AND VOLUME OF THE WATER THAT CAME OUT IN THE MESS CYLINDERS. WHICH SOIL IS THE MOST RESISTANT TO EROSION BY WATER?

**MATERIALS**

- Soil material from three different land uses (bare soil, soil under grass, soil from a crop field).
- Water
- Three 1,000 mL beakers
- Three plastic bottles
- Balance
- One 100 mL and three 1,000mL transparent mess cylinders



## Understanding that soil contains air

GLOBAL SOIL PARTNERSHIP

**UP TO 50% OF THE SOIL IS MADE UP OF AIR!**

**Air in the Soils** Up to 50% of the soil is made up of diverse gases - simply said, air! Among these gases, oxygen plays a crucial role for letting plant roots and soil animals breathe. Certain soil bacteria are able to use different gases such as carbon dioxide or nitrogen gas in their metabolisms. Soil gases can prevail within the pore network of soils. When soil is compacted or filled with water, there is less space for soil air.

**1** MOISTEN THE SOIL LIGHTLY AND PREPARE SEVERAL SIMILARLY SIZED SOIL CLODS WITH YOUR HANDS.

**2** SPRAY THE CLODS AND WAIT 2 MINUTES.

**MATERIALS**

- 3-4 different soils
- Beakers (or jars)
- Tap water
- 1 Sprayer

**3** DRIP THE CLODS IN DIFFERENT JARS FILLED WITH WATER, WATCH THE BUBBLES.

**4** COMPARE THE GENERATION OF BUBBLES BETWEEN THE DIFFERENT CLODS. WHERE CAN YOU SEE THE LARGEST AMOUNT OF AIR? WHAT CAN THIS MEAN FOR PLANTS AND ANIMALS LIVING IN THE SOIL?

# PE

## Hitherfield's Virtual Sports Day

Sports Day is one of the main events in our school calendar and we couldn't let a global pandemic stop us celebrating together. However, we do have to stay safe and be responsible, so next week we are celebrating our Sports Day a little differently.

See our Sports Day challenges explained below. They can be done in your kitchen, living room, bedroom, garden and / or the park. So, get your family involved and compete against them.

To earn points for your house team, make sure you upload your photos or videos of the challenges you have completed on Seesaw (or draw a picture of the challenges you have completed and send it to us by post) by Monday 13<sup>th</sup> July. Complete as many challenges as you like, it's up to you! However, the more challenges you do the more points you earn for your house team.

Certificates will be awarded for participation. There will be 3 levels for participation:

- Bronze - 2 challenges uploaded on Seesaw (or sent by post)
- Silver - between 3 and 7 challenges uploaded on Seesaw (or sent by post)
- Gold - 8 or more challenges uploaded on Seesaw (or sent by post)

We hope you have lots of fun with our Sports Day challenges and enjoy taking part with those in your household. Good Luck!





### TIDY UP TIME!



SCATTER A RANGE OF OBJECTS ON THE FLOOR. COLLECT ONE OBJECT AT A TIME AND RETURN IT TO THE STARTING POINT. HOW LONG DOES IT TAKE YOU TO GO BACK AND FORTH COLLECTING ALL THE OBJECTS? WHO COLLECTED THE MOST OBJECTS?

### SACK RACE



GET INTO A PILLOW CASE OR BIN LINER. HOW LONG DOES IT TAKE YOU TO TRAVEL FROM ONE END OF THE ROOM OR GARDEN AND BACK?

### Bin it!




HOW MANY TIMES CAN YOU GET A BALL, A ROLLED UP SOCK OR A SCRUNCHED UP PIECE OF PAPER INTO A TARGET (FROM A DISTANCE) IN ONE MINUTE?

YOU CAN USE A BASKET, BIN, BOX OR BOWL FOR YOUR TARGET.

### JUST ONE MINUTE!

HOW MANY CAN YOU DO IN 1 MINUTE?



JUMPING JACKS/ STAR JUMPS




SIT UPS

CHOOSE A CHALLENGE.



PRESS UPS



MOUNTAIN CLIMBERS

### FAST FEET



HOW FAST CAN YOUR FEET GO?

SPRINT ON THE SPOT FOR 30 SECONDS.

NOW TRY SPRINTING ON THE SPOT FOR 1 MINUTE.

### OBSTACLE COURSE

MAKE UP YOUR OWN OBSTACLE COURSE.



BE CREATIVE WITH YOUR OBSTACLE COURSE. USE OBJECTS FROM YOUR HOME SO YOU CAN CRAWL, CLIMB, JUMP, LEAP, SLIDE AND BALANCE.

HOW LONG DID IT TAKE FOR YOU TO COMPLETE THE COURSE? CAN YOU BEAT YOUR TIME?

## South London Women Artists (video on seesaw)

### Activity 1: Jane Higginbottom – A mobile from nature



Isn't nature wonderful? It's all you need (plus some string) to create a stunning hanging mobile like Jane's. Grab a bag and an adult and go gather some leaves, sticks, pinecones, feathers and whatever else takes your fancy to create one of these superb mobiles.

### Activity 2: Joan Kendall – Weaves of life

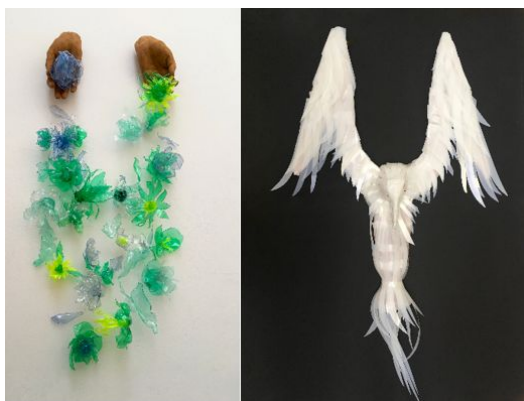


Got some wool lying around? Be inspired by Joan Kendall's weaves and have a go at creating your own. She said she uses strong colour and texture to create her art and that life and the environment are her inspiration.

You can make a simple weave using cardboard. Here's a link to show you how:

[https://www.youtube.com/watch?v=AWLly-Um7\\_0](https://www.youtube.com/watch?v=AWLly-Um7_0)

### Activity 3: Rachel Reid's – Sculptures to make you wonder



Rachel's work inspires freedom to create what you like with what you have. You could gather things from nature to make an animal, perhaps a hedgehog sculpture or you may want to make a comment on something that is important to you. Remember, Rachel's recent work aims to show the resilience of people living on the streets. Your imagination is the only limitation here!

# Computing – Programming

This term, we are exploring computer programming. Check out these coding websites and try a different activity each week.

**Code Monster** <http://www.codemonster.io/>

Introduce your kids to Javascript programming taught through a fun and interactive session by their favourite monster.

**Play Code** <https://playcode.io/>

Online code editor.

**Scratch** <https://scratch.mit.edu/explore/projects/games/>

Creative computer programming.

**Coding Club Online** <https://projects.raspberrypi.org/en>

A variety of online coding challenges.

**Hour of Code** <https://code.org/hourofcode/overview>

Guided coding activities.

**Code Combat** <https://codecombat.com/>

A site for kids of all ages who love playing online games and want to learn how to code in the process.

**Maths- escape the forest answers:**

