

Week Four : Let's be scientists

To all of our wonderful Mount Street Infants and their families,

This week we have put together a collection of science investigations for you to try out.

Some of the ideas are about observation whilst others are about making your own investigation. Email us to let us know how you get on...

learning@mountstreeti.powys.sch.uk

If you want to update your factual knowledge, there are many great websites incl...

<https://www.dkfindout.com/uk/>

<https://www.bbc.co.uk/bitesize/articles/zvbxt39>

<https://www.natgeokids.com/uk/>

<https://www.technquest.org/daily-demos/>

<https://www.bbc.co.uk/iplayer/episode/b0bqm9vv/kit-pup-series-1-46-bubbles>

<https://www.rigb.org/families/experimental/trailer>

We also have another activity grid, which is based on literacy.

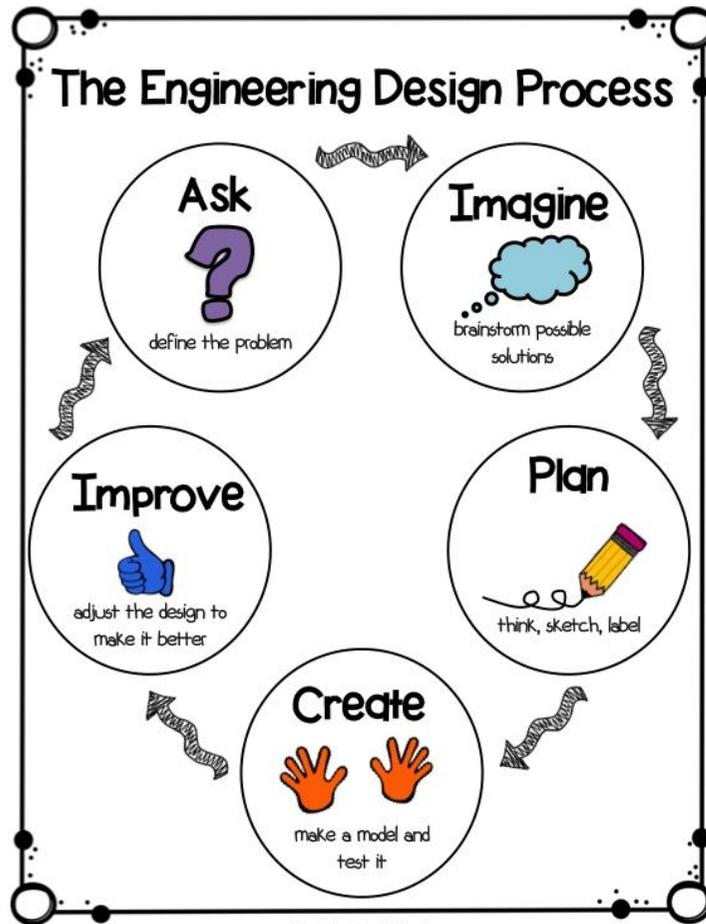
It is meant to last for more than just this week so take your time trying out each one.

We are still missing you but know you are safer if you stay at home

Have fun

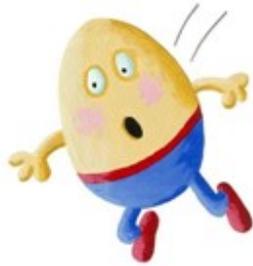
From all of the staff at Mount Street Infant School

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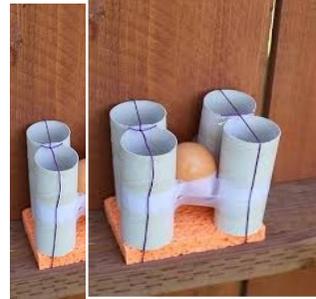


	Progression step 1	Progression step 2
	<ul style="list-style-type: none"> • I can show curiosity and question how things work. 	<ul style="list-style-type: none"> • I can ask questions and use my experience to suggest simple methods of inquiry.
	<ul style="list-style-type: none"> • I can show curiosity and question how things work. 	<ul style="list-style-type: none"> • I can ask questions and use my experience to suggest simple methods of inquiry.
	<ul style="list-style-type: none"> • I can explore the properties of materials and choose different materials for a particular use. • I can design while I make during play. 	<ul style="list-style-type: none"> • I can produce designs from my own ideas in response to particular contexts. • I can make design decisions using my knowledge of materials and existing products. • I can communicate my design ideas before making • I can explore and describe the properties of materials and justify their uses.
	<ul style="list-style-type: none"> • I can communicate about what I am making. • I can safely use simple tools, materials and equipment to construct and deconstruct • I can explore the way objects move. 	<ul style="list-style-type: none"> • I can explore how different component parts work together. • I can safely use a range of tools, materials and equipment to construct for a variety of reasons • I can investigate and predict the effects of forces in everyday life
		<ul style="list-style-type: none"> • I can improve my designs as a result of evaluation.

Humpty Dumpty sat on a wall, Humpty Dumpty had a great fall.
.....Uh oh!



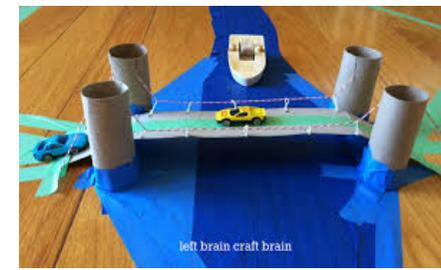
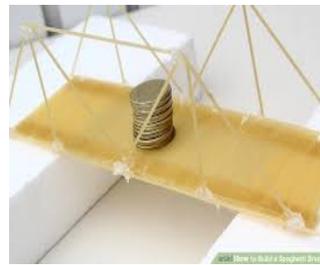
How many ways can you think of to help Humpty Dumpty get down safely?
Design and build a device to protect Humpty Dumpty when he falls to prevent him from cracking?
If your design does not work, try and improve it and try again.



London Bridge is falling down, falling down, falling down, falling down,
London Bridge is falling down, my fair lady. Build it up with



How many ways can you think of to build a bridge?
Design and build your own bridge?
Is it strong? How many pennies can you balance on your bridge?
If your design does not work, try and improve it and try again.



**I follow you around in the light, I say goodbye to you in the night. Who am I?
Your shadow!**

What is a shadow?

A shadow is the dark shape made when something blocks light from a light source.

Click on the link to find out more about light sources and shadows.

<https://www.bbc.co.uk/bitesize/topics/z3hhvcw/articles/zp23r82>

Some fun activities for you to explore shadows:

- Ask someone to chalk around your shadow, when the outline is complete you can either colour it in or just draw on some features, clothes etc.
- If you don't have a concrete area or a patio to chalk on, you could play 'Shadow Tag' on the lawn. Instead of tagging each other you tag each other's shadow.
- Make some shadow drawings using your favourite toys, all you need is a sheet of white paper, a pencil and a toy. Animals, dinosaurs, and building block towers work really well.
- Click here to see shadow puppeteer Manju Gregory at work <https://www.bbc.co.uk/bitesize/clips/zkqw2hv>



Dyma lliwiau enfys, lliwiau enfys, lliwiau enfys hardd.

Rainbows have become a symbol of hope during these difficult times.
Here's an idea on how you can make your own rainbow. Stay safe everyone!

Rainbows are formed when light shines through water, like when the sun shines through the rain. This light is bent and reflected, like a reflection in a mirror, and this causes all of the amazing colours that you see.

Make your own rainbow using a mirror.

You will need:

- A glass pan or jar
- A mirror that fits in the pan or jar
- Water
- A white wall or ceiling (or white paper to cover a coloured wall/ceiling)



- 1) Pour the water into your glassware.
The exact amount doesn't matter.
 - 2) Put your mirror in the water.
 - 3) Place it in a sunny spot.
 - 4) Play with tilting the mirror until you see rainbows form on the wall or ceiling.
-

I'm a little teapot

Walking Water Experiment

How to move water from one cup to another without picking up the cups.



To set up this experiment, you will need

- Two cups or glasses of equal size
 - Water
 - Food colouring
 - Paper towel
-
- Set your two identical cups or glasses about 2 inches apart. Pour water into one of the cups until it's halfway full.
 - Add a few drops of your favourite food colouring to the water and stir the food colouring until the water is one colour.
 - Take a strip of paper towel and fold it until it's 1 to 2 inches wide.
 - Place one end of the paper towel strip into the coloured water and the other end into the empty cup/ glass. Let them sit for approximately one hour.
 - Return to the cup and observe what happened.

<https://scienceexplorers.com/walking-water-experiment-for-kids/>

**Spoiler alert: half of the coloured water will be in the other cup/ glass. The paper towel will be the same colour as the coloured water.*

Somewhere Over the Rainbow

Walking Rainbow Experiment

How to create a rainbow from red, yellow and blue water.



To set up this experiment, you will need

- Seven cups or glasses of equal size
 - Water
 - Food colouring (red, yellow, blue)
 - Paper towels
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- Set your identical cups or glasses about 2 inches apart.
 - Pour water into Cup 1, Cup 3, Cup 5 and Cup 7 until half full.
 - Add five drops of red food colouring to Cup 1 and Cup 7.
 - Add five drops of yellow food colouring to Cup 3.
 - Add five drops of blue food colouring to Cup 5.
 - Fold six strips of paper towel until they are 1 to 2 inches wide.
 - Place one end of a paper towel strip into the red water of Cup 1 and the other end into the empty Cup 2.
 - Place another paper towel between empty Cup 2 and the yellow water in Cup 3. Continue until there is a paper towel between each cup.
 - Let them sit for approximately one hour.
 - Return and observe what happened.

**Spoiler alert : the coloured water will have travelled to the empty cups and mixed to make new colours (red orange, yellow, green, blue, indigo, violet)*





Float and Sink?



Will it float or sink?

What you need:

- A bucket or large jug of water (preferably transparent)
- A variety of items, some of which may sink and which will float including a boat

How you do it: gather a tray containing a mix of different items, holding up each item in turn and have the children guess if it will float or sink. Of course, you have to make sure that you've got items that'll do both! Let the children predict what they think will happen and then test out their predictions by placing the objects in the water.



Float and Sink

TO THE TUNE OF "I HAD A LITTLE TURTLE"



I had a little _____

I put it in my boat,

I tossed it in the water,

To see if it would float,

And do you know what happened?

Did it float or sink?

Stretch up high or bob down low,

To show me what you think.

Bubble, bubble, bubble...float/sink!

Bubble, bubble, bubble...float/sink!

If you want more of a challenge:

Will an orange float or sink?

What you need:

A jug or vase $\frac{3}{4}$ filled with water.
An orange

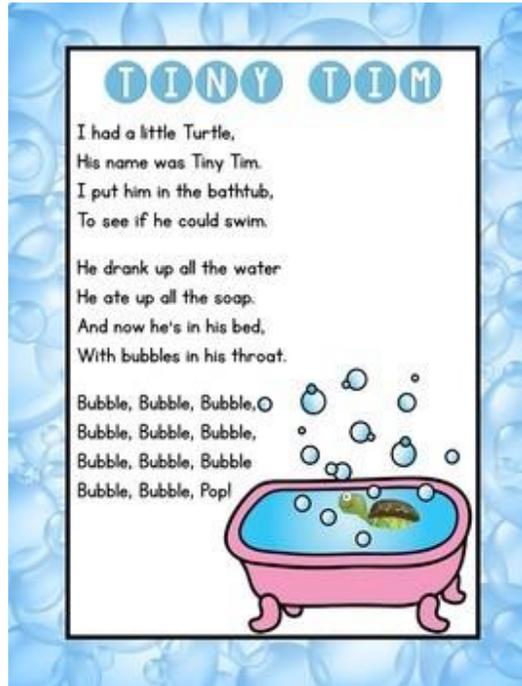
How you do it: Make a prediction of whether you think the orange will float or sink. Drop the **orange** into water and it **floats!**

Now remove the peel from that same **orange** and it will **sink**.

*The unpeeled **orange floats** because the rind is very porous and filled with tiny pockets of air. Even though you're removing mass when you peel the **orange**, the peeled **orange** is denser and **sinks** in the water.*

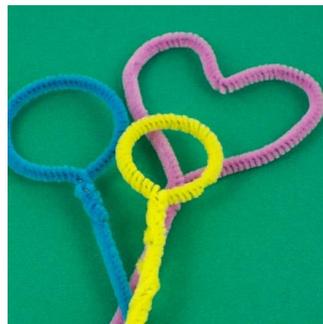
❖ **Could you design a life jacket for your orange to stop it from sinking?**





Can you make different shaped bubbles?

Make different shaped bubble wands with things you have in the house - a cookie cutter and a peg or pipe cleaners etc.
Dip your bubble wand in bubble solution and see what shape the bubbles are.
Did your bubbles change shape using your different wands?



How do you make homemade bubble solution?

Instructions

- Get a large cup.
- Pour 1/2 cup of dish soap into the cup.
- Add 1 1/2 cups of water.
- Measure 2 teaspoons of sugar and add it to the water/soap mixture.
- Gently stir your mixture.
- Go outside and blow bubbles!



How to make a bubble maker

You will need:

- an old sock,
- empty plastic drink bottle,
- an elastic band,
- some bubble solution.

1. Cut the bottom off the bottle.
2. Slip the sock over to cover the bottom and add the elastic band to hold it in place.
3. Dip the sock into a dish of bubble solution.
4. Blow and watch the bubbles grow

An extra idea

Put some food colouring on the sock and see if you can make different coloured bubbles.



<https://www.bbc.co.uk/iplayer/episode/b0bqm9vv/kit-pup-series-1-46-bubbles>

Watch Kit and Pup find out about bubbles.

<https://www.rigb.org/families/experimental/giant-bubbles>

Watch and find out how to make a giant bubble.

Literacy Activity Grid for the month of May

Oracy

Perform a poem or song

You could record your performance and send it to learning@mountstreeti.powys.sch.uk for all us teachers to enjoy!



Play a game of **Stop the Bus** with members of your family; Play individually or in family teams; Prepare a small grid for each player and choose 3 (or more) categories, eg...

Food	Animal	Country

Start saying the alphabet and stop on a letter, eg. F
Now everyone fills in their grid....



Food	Animal	Country
fishfinger	frog	France

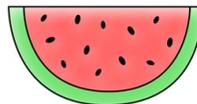
First person to fill in grid shouts '**Stop the Bus**' and gets a point - Start again choosing a different letter.

<https://www.youtube.com/watch?v=9nslEXxCwNA>

Play Watermelon

It's a describing game that needs no preparation!
Describe something. ANYTHING
There is only one rule!
You can't use the objects name in your description
Instead you have to say 'WATERMELLON'
eg. Person A says....

- 'My watermelon is cute'
- 'My watermelon has four legs'
- 'My watermelon is cuddly'
- 'My watermelon has whiskers ...'



Person B 'Is it a cat?'

Person A 'Yes!'

<https://www.youtube.com/watch?v=UfOoxrKKcoc>

Play 'Guess my Animal?

One person thinks of an animal.

The other person has to ask questions to guess what it might be. The only reply can be 'Yes' or 'No'

- E.g Does it have fur? **No**
Does it eat meat? **Yes**
Does it have any legs? **No**
Does it lay eggs? **Yes**
Is it a snake? **YES!**

(challenge them to use words like nocturnal/carnivore/habitat/mammal etc)



Draw a picture of a character from the description in your favourite book. Create a new character for your book and describe their character.

- E.g
- Kind
- Gentle
- Huge
- Scared
- Lonely
- Elderly



Why not read

- a book that someone in your family read when they were young.
 - a poetry book,
 - a play,
 - a non-fiction book about something that interests you,
 - a book set in a different country,
 - a children's comic book or magazine,
 - a book set in a different time in history
- Or
- read about a real person,
 - share a book with a friend by reading to each other on ZOOM or Facetime or other digital communication.

Draw or make a story map of a story you know really well and have read lots of times, eg. 'Goldilocks' or 'Going on Bear Hunt'

<https://www.talk4writing.co.uk/covid-19/>



Create an animation of the story using JiT5 Animate on your Hwb account.

Look online for free e-books and book recommendations...

<https://home.oxfordowl.co.uk/books/free-ebooks/>

(scholastic learning at home, bookflix)

<https://classroommagazines.scholastic.com/support/learnathome/grades-prek-k.html>

<https://www.bbc.co.uk/bitesize/articles/zmpm6v4>

<https://www.booktrust.org.uk/books-and-reading/have-some-fun/>



Writing

Write a letter or postcard to one of your school friends or grandparents

What a lovely surprise it would be for them to receive a postcard from you!



Lie on the floor outside. Using your senses. Write down words to describe what you can hear/see/smell/feel.

Put the list together to make up your own poem.

Write out the recipe of your favourite cake or meal and share it with your class teacher!



Make sure you take time to write neatly so they can read it easily / or you could type it on Hwb!

Life after lockdown list!



Write a list of all the people you will visit!

Places you want to go to!

Activities you will do!

Clubs to re-join or start!

Keep Smiling and stay safe...

We will all have fun together soon.

Stop the Bus

This a great game to revise vocabulary and you can use it with any age group and any level by changing the category headings.

	animals	colours	food	clothes	countries	sports
T	tiger	turquoise	tuna	trousers	Tunisia	tennis

How to play

You can play in teams or individually

- Draw a table like the one below - each person or team has a table to fill in.
- Aim is to think of one item to go in each category beginning with the set letter. (You or
- The first team/person to finish shouts 'Stop the Bus!'.)
- If it gets too difficult with certain letters (and you can't think of one for each category) reduce the amount of words they have to get.

For higher levels change the category headings. For example:

	something in the Kitchen	something in the living room	something in the bedroom	something in the bathroom	something in the office	something in the garden
S	spices	sofa	sock	soap	staples	seat

Or, for even higher levels:

	something made of metal	something made of glass	something made of plastic	something made of wood	something made of material
B	bike	bottle	bin	bench	belt

.....

Reminder - High Frequency Words (Rocket Words) to practice for the month of May

First 100 High Frequency Words in frequency order reading down the columns

the	that	not	look	put
and	with	then	don't	could
a	all	were	come	house
to	we	go	will	old
said	can	little	into	too
in	are	as	back	by
he	up	no	from	day
I	had	mum	children	made
of	my	one	him	time
it	her	them	Mr	I'm
was	what	do	get	if
you	there	me	just	help
they	out	down	now	Mrs
on	this	dad	came	called
she	have	big	oh	here
is	went	when	about	off
for	be	it's	got	asked
at	like	see	their	saw
his	some	looked	people	make
but	so	very	your	an

Don't forget there are spelling games on the BBC bitesize website...

<https://www.bbc.co.uk/bitesize/topics/zcgv39q>

Next 200 High Frequency Words

in frequency order reading down the columns ('water' to 'laughed' then 'let's' to 'grow')

water	bear	find	these	live
away	can't	more	began	say
good	again	I'll	boy	soon
want	cat	round	animals	night
over	long	tree	never	narrator
how	things	magic	next	small
did	new	shouted	first	car
man	after	us	work	couldn't
going	wanted	other	lots	three
where	eat	food	need	head
would	everyone	fox	that's	king
or	our	through	baby	town
took	two	way	fish	I've
school	has	been	gave	around
think	yes	stop	mouse	every
home	play	must	something	garden
who	take	red	bed	fast
didn't	thought	door	may	only
ran	dog	right	still	many
know	well	sea	found	laughed

let's	fun	any	better	lived
much	place	under	hot	birds
suddenly	mother	hat	sun	duck
told	sat	snow	across	horse
another	boat	air	gone	rabbit
great	window	trees	hard	white
why	sleep	bad	floppy	coming
cried	feet	tea	really	he's
keep	morning	top	wind	river
room	queen	eyes	wish	liked
last	each	fell	eggs	giant
jumped	book	friends	once	looks
because	its	box	please	use
even	green	dark	thing	along
am	different	grandad	stopped	plants
before	let	there's	ever	dragon
gran	girl	looking	miss	pulled
clothes	which	end	most	we're
tell	inside	than	cold	fly
key	run	best	park	grow

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