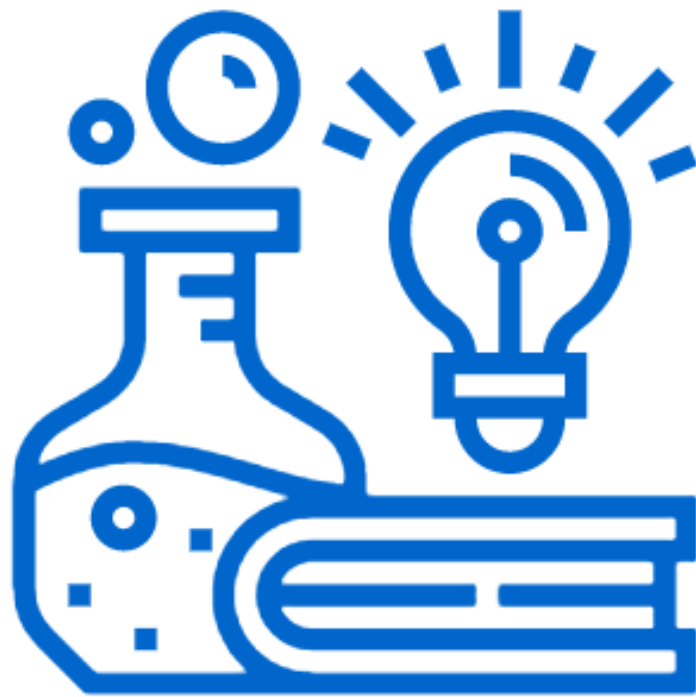


Making the Everyday, Exciting!

29th June to 3rd July



Science Week

Making the Everyday, Exciting!

Science Week 2020

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Timetable

	Monday 29 th	Tuesday 30 th	Wednesday 1 st	Thursday 2 nd	Friday 3 rd
Daily challenges	Biscuit dunking challenge	Double bubble	Optical illusions	Paper aeroplane challenge	Changes
Video links	Live from the Space Shed Biscuit Review with Maddie Moate https://www.youtube.com/watch?v=2tqQXao_uMjl	CBeebies Do you know? How bubbles work! https://www.youtube.com/watch?v=A4n4bY8-Ufs	Let's Go Live with Maddie and Greg Brain Games & A Happy Mind https://www.youtube.com/watch?v=yilEovRN6LQ (13.00 – 17:15)	CBeebies Nina and the Neurons Aeroplanes https://www.youtube.com/watch?v=fi-kM9b4mmg	CBeebies Do you know? How does sand turn into glass? https://www.youtube.com/watch?v=AMMiU3ZpB_E
Parent scientists (links on Class Dojo)	<u>Mike Barker:</u> Hedgehog sightings	<u>Peter Fretwell:</u> Moths	<u>Louisa Haine:</u> Visual illusions	<u>Cara Heaney:</u> Aerodynamics	<u>Sally Lee:</u> Orchids
Other	Tree ID Walk Science Competition		Virtual School Trip		Science Fair Celebration

Daily Task Resource List

Hedgehogs

Monday	<ul style="list-style-type: none"> • 4 types of biscuits including a Gingerbread Man • A cup • Warm water 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Tuesday	<ul style="list-style-type: none"> • A cup • A straw • ½ teaspoon of sugar • 1 teaspoon of washing up liquid • Warm water • Tablespoon • Teaspoon 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Wednesday	<ul style="list-style-type: none"> • White card or paper • Pencils or felt tip pens • Straw or pencil • Scissors • Glue or tape 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Thursday	<ul style="list-style-type: none"> • Paper • Straws • Sticky tape 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Friday	<ul style="list-style-type: none"> • 1 small zip-lock bag • 1 large zip-lock bag • ½ cup double cream • ½ cup whole milk • 1 tbsp sugar • 1 ½ tsp vanilla essence • Ice • ¼ cup salt 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Swifts

Monday	<ul style="list-style-type: none"> • A chocolate digestive • A plain digestive • A cup • Warm water 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Tuesday	<ul style="list-style-type: none"> • A cup • A straw • ½ teaspoon of sugar 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

	<ul style="list-style-type: none"> • 1 teaspoon of washing up liquid • Warm water • Tablespoon • Teaspoon 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Wednesday	<ul style="list-style-type: none"> • Plain paper • Pencil • Colouring pencils • Black marker 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Thursday	<ul style="list-style-type: none"> • Paper • Straws • Sticky tape 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Friday	<ul style="list-style-type: none"> • Cornstarch or cornflour • Food colouring • Water • Bowl • Spoon 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Bees

Monday	<ul style="list-style-type: none"> • 3 types of biscuits with different thickness • A mug or glass • Warm water 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Tuesday	<ul style="list-style-type: none"> • A cup • A straw • ½ teaspoon of sugar • 1 teaspoon of washing up liquid • Warm water • Tablespoon • Teaspoon • Ruler 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Wednesday	<ul style="list-style-type: none"> • Plain paper • Pencil • Felt tips 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Thursday	<ul style="list-style-type: none"> • Paper • Paperclips • Stapler 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Friday	<ul style="list-style-type: none"> • A balloon • A plastic bottle • A straw • Water 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

	<ul style="list-style-type: none"> • A small container, e.g. a glass 	<input type="checkbox"/>
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Butterflies

Monday	<ul style="list-style-type: none"> • 3 types of biscuits with sugar • A mug or glass • Warm water 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Tuesday	<ul style="list-style-type: none"> • A cup • A straw • ½ teaspoon of sugar • 1 teaspoon of washing up liquid • Warm water • Tablespoon • Teaspoon 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Wednesday	<ul style="list-style-type: none"> • Paper • Pencil 	<input type="checkbox"/> <input type="checkbox"/>
Thursday	<ul style="list-style-type: none"> • Paper • Paperclips • Stapler 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Friday	<ul style="list-style-type: none"> • A larger zip-lock bag • A smaller zip-lock bag • 2-3 trays of ice cubes • 6 tbsp of table salt • Warm gloves / a towel • One cup of milk (either flavoured or with added sugar / vanilla essence) 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Monday's Science Challenge – Dunking Biscuits

Have you ever dunked a biscuit in a cup of tea or milk? Has the biscuit ever broken?



For today's daily challenge, we will be exploring biscuit dunking....

Top tips for dunking biscuits:

- Make sure you have a mug or glass wide enough to fit your largest biscuit.
- Always dunk your biscuit vertically to make sure it is a fair test ⇅.
- When you dunk, make sure half of the biscuit is in the liquid and half remains outside.

Hedgehog Class

The Gingerbread Man - Read the story

We're going to investigate whether if the Gingerbread Man was made of a different biscuit he would have been able to swim across the river without the help of the fox.



You will need:

- 4 types of biscuit including a Gingerbread Man.
- Cup of warm water (not boiling) wide enough to dunk a biscuit in.

Method:

- Fill your cup with warm water.
- Take one biscuit and dunk it into the water, holding half in the water and half outside for one second.
- Repeat this step with the same biscuit until it becomes soggy and starts to crumble.

- Remember to count how many times the biscuit is dunked before it falls apart.
- Repeat the activity for each biscuit using new water.

Questions to ask:

- What do you think will happen to the biscuits when dunked in the water?
- Which biscuit do you think will fall apart first? why?
- Which biscuit do you think will take the longest to fall apart? why?
- Which biscuit should the Gingerbread Man have been made of to cross the river without the help of the fox?

Name of biscuit	Number of dunks
Gingerbread Man	

Swift Class

Are chocolate biscuits better dunkers than plain ones?

Which biscuit do you think will last the longest when dunked in warm water?

You will need:

- Chocolate digestive
- Plain digestive
- Cup wide enough to dunk a biscuit in
- Warm water (not boiling)

Method:

- 1) Fill your mug or glass with warm water.
- 2) Take one biscuit and dunk it vertically ⇅ into the water for one second, holding half in the water and half outside.
- 3) Take the biscuit out of the water and hold it horizontally <-> above the cup.

- 4) If the biscuit stays intact, repeat steps 2 and 3. If the biscuit breaks, write down the number of dunks it took to break the biscuit.
- 5) Change the water for each new biscuit being tested.

Chocolate digestive	Plain digestive

Now, answer the question: *'Are chocolate biscuits better dunkers than plain ones?'* Think about why or why not.

Bee Class

Does the thickness of a biscuit affect how many times it can be dunked before it breaks?

You will need:

- 3 types of biscuit with different thickness
- A mug or glass wide enough to fit your largest biscuit
- Warm water (not boiling)

Method:

- 1) Measure the thickness of each biscuit and complete the table below.
- 2) Fill your mug or glass with warm water.
- 3) Take one biscuit and dunk it vertically ⇕ into the water for one second, holding half in the water and half outside.
- 4) Take the biscuit out of the water and hold it horizontally <-> above the mug or glass.
- 5) If the biscuit remains intact, repeat step 3 and 4. If the biscuit breaks, write down the number of dunks it took to break the biscuit.
- 6) Change the water for each new biscuit being tested.

Name of biscuit	Thickness (cm)	Number of dunks

Look at your results. What do you notice? *Are there any patterns in your results?*

Why do you think this happened? *Consider what happens to the sugar in the biscuit each time you dunk it in the warm water.*

Finally, answer the original question, '**does the thickness of a biscuit affect how many times it can be dunked before it breaks?**'

Butterflies Class

Does the sugar content of a biscuit affect dunking time?

You will need:

- 3 types of biscuit with different sugar contents
- A mug or glass wide enough to fit your largest biscuit
- Warm water

Method:

- 1) Complete the first two columns of the table below.
- 2) Fill your mug or glass with water.
- 3) Take one biscuit and dunk it vertically ⇅ into the water. Hold so half the biscuit is submerged in the water.
- 4) Dunk the biscuit in the water for 1 second, then remove and hold above the mug.
- 5) If the biscuit remains intact, repeat step 3 and 4. If the biscuit breaks, write down the number of dunks it took to break the biscuit.
- 6) Change the water for each new biscuit being tested.

Name of biscuit	Sugar content per biscuit (g)	Number of dunks

What do you notice about your results?

Why do you think this happened?

Finally, answer the original question, 'Does the sugar content of a biscuit affect dunking time?'

Tuesday's Science Challenge – Double Bubble

For today's daily challenge, we are going to put a bubble in a bubble – or a double bubble!



Did you know?

The Guinness World record for the most soap domes created inside one another is 15! The record was set in Taipei, Taiwan in 2012 by a man named Su Chung-Tai. He used a large tube to blow a huge bubble dome then smaller tubes to blow bubbles inside one other. Amazing!

Equipment needed:

- 1 cup
- 1 straw
- ½ teaspoon of sugar
- 1 teaspoon of washing-up liquid
- Jug of warm water
- Tablespoon
- Teaspoon
- Flat surface (with no bumps or imperfections) such as laminated card or plastic tablecloth.

Method:

- 1) Place 2 tablespoons and 2 teaspoons of warm water into a cup.
- 2) Add ½ teaspoon of sugar and stir it until dissolved.
- 3) Add 1 teaspoon of washing-up liquid and stir well.
- 4) Dip your finger into the bubble mixture and spread it over the flat surface you will be blowing your bubbles on.
- 5) Submerge one end of the straw in the bubble solution so that it's completely coated.
- 6) Place the coated end of the straw vertically on to your surface. Then, through the other end of the straw, blow a fairly large bubble.
- 7) Dip the straw back into the bubble solution, then, aiming for the centre of the first bubble, gently push it inside.
- 8) Gently blow a second bubble on the surface of the desk inside the first bubble.

Health and Safety:

- Ensure children do not taste or drink the bubble mixture.
- Children who are seriously allergic or sensitive to soap or detergent products, should not do these activities.
- Ensure children wash their hands after the activity.

Hedgehog Class

Who can blow a double bubble?

Follow the instructions above to create a double bubble.

You may need to spend time practising a bit before you can do it.

Who in your family can create a double bubble?

Swift Class

Do bubbles always pop?

Follow the instructions to create bubbles on a surface. Is it possible to insert a finger or object into a bubble without it popping? Make a prediction and test it.

You may need to spend time practising testing this. Can anyone else in your family do it? Why do you think it happened?

What happens when bubbles touch? Make a prediction and test it. Were you surprised at the result?

Bee Class

Who can blow the biggest double bubble?

Follow the instructions above to create a double bubble.

Spend time practicing this to perfect your bubble blowing technique.



Once you have a double bubble, coat a small plastic ruler with bubble solution and slide it vertically into the middle of your bubbles to measure their height – both the inner and outer bubble.

You can either try to beat the height of your biggest inner or outer bubble or have a competition with a family member to see who can blow the biggest bubble. Who will be the double bubble blowing champion?

Butterflies Class

Does sugar affect your bubble?

Follow the instructions above to create a bubble solution.

Then create a slightly different solution by not adding the sugar.

Experiment creating double bubbles (following instructions above) with each solution.

Is there a difference in bubbles or creating double bubbles between the two solutions?

Why do you think that might be?

Wednesday's Science Challenge – Optical Illusions

Are you seeing what's really there or is your mind tricking you? For today's challenge, we are going to look at optical illusions....



Are the two horizontal rails the same length?

Yes, they are! Try cutting a piece of paper to the same length to check.

The slanted lines make us believe the top line is further away. This confuses our brains which then makes the line appear bigger.

Hedgehog Class

Turn 2 pictures into 1

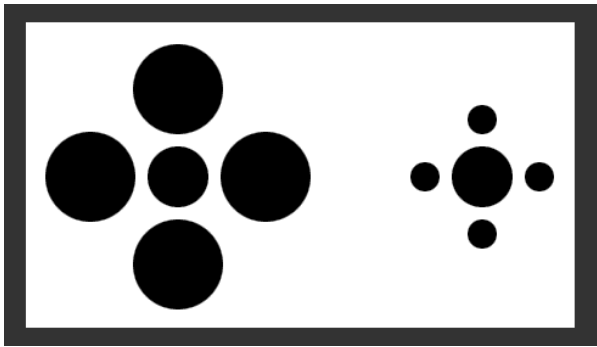
You will need:

- white card or paper.
- Pencils or colouring pens.
- Straw or pencil
- Scissors
- Glue/Tape

Method:

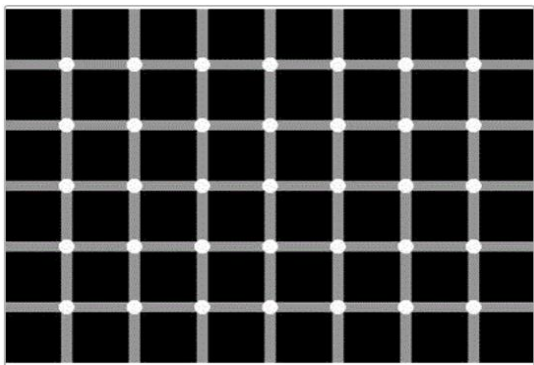
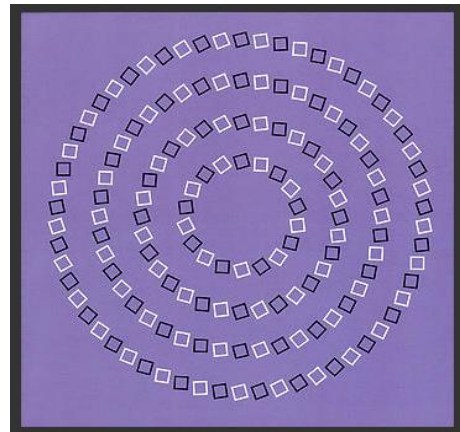
- Cut out two squares from the white card/paper.
- Draw a fish on one square and a fish tank on the other square.
- Glue or sellotape a pencil in between the two pictures.
- Hold the pencil between your palms and spin round. You should see your fish in your fish tank.





Look at the dots in the centre. Which one is bigger? How do you know?

What does this look like? Follow it with your finger. Are you surprised at what you found? Why?



Count the black dots. How many can you see?

Can you make your own 3D illusion? Here's one I made earlier!

1. Locate the centre of the page - draw a dot with a pencil.
2. Still using the pencil, draw approximately 6 straight lines through the centre.
3. Still using the pencil, draw "happy face" curved lines in sections.
4. Colour in the sections, alternating one coloured, one blank.
5. Trace over all pencil lines (straight and curved) with a black marker.
6. Add a picture of yourself jumping or falling!



Bee Class

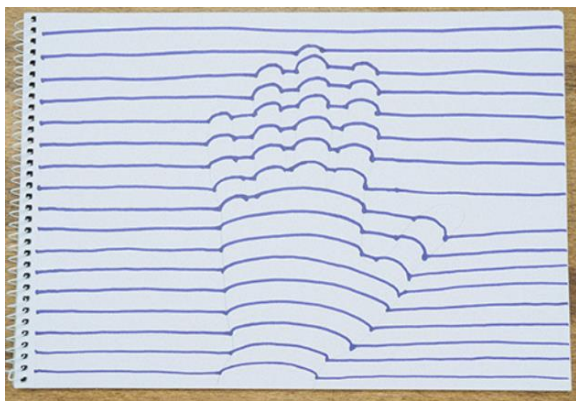
A 3D Hand Illusion

You will need:

- A plain piece of A4 paper
- Pencil
- Felt tips

Method:

- 1) Trace your hand (and a bit of your wrist) using a pencil. Remember to do it lightly.

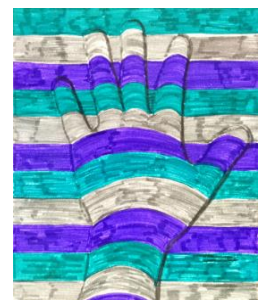
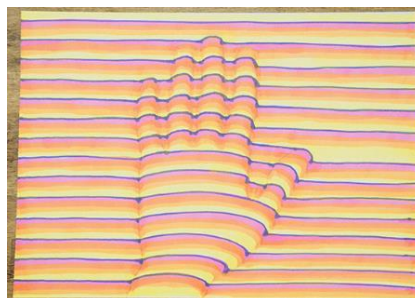


- 2) Now take a felt tip and draw straight lines across the paper up to the outline of your hand. Once you reach your hand, draw a curved line to the next point on the outline and then continue with a straight line.

- 3) It's time to make your 3D hand more lively! Take at least 3 felt tips in different colours and fill the gaps between the basic lines by drawing lines in between. Always repeat the same order of colours. If it's necessary, fill any white spots you missed.

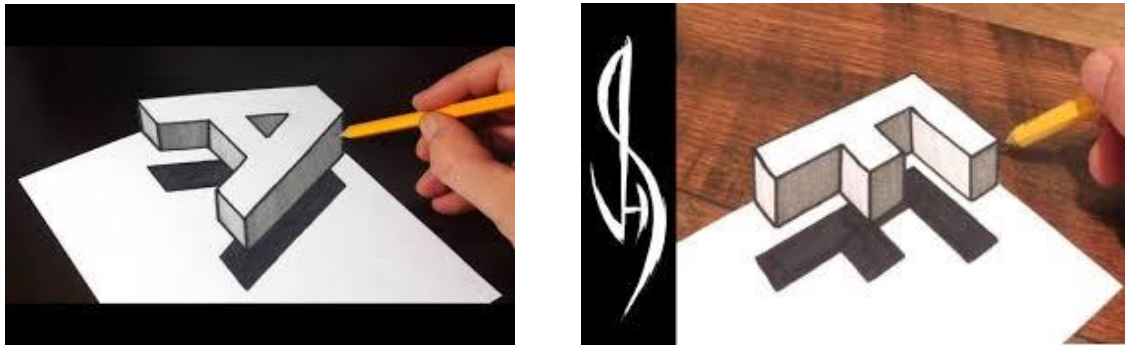


- 4) Take a step back and admire your 3D hand illusion!



Butterflies Class

Draw a 3-D floating letter.



Watch this video about how to draw a floating 3D letter A:

<https://www.youtube.com/watch?v=jr-zAxfTVU>

Can you try it with the first letter of your name? You may be able to find similar videos for other letters.

Extension:

If you want an even tougher challenge, you can try something similar with a hand . . .



<https://www.youtube.com/watch?v=ZZD57bDFp8A>

Thursday's Science Challenge – Paper Aeroplanes

For today's challenge, you are going to make and fly paper aeroplanes!



Did you know?

- The longest time flying a paper aeroplane is 29.2 seconds. This was set by Takuo Toda in Japan in 2010. Watch the record-breaking flight here: <https://youtu.be/YBQezzTovZY>
- The longest distance for flying a paper aeroplane is just over 69 metres! The aeroplane was designed by John Collins and thrown by Joe Ayoob in the USA back in 2012. Watch how far it travels here: <https://youtu.be/wedcZp07raE>

Hedgehog and Swift Class

Which glider design is best?

SIMPLE GLIDERS



Today, you are going to make hoop gliders.

You will need:

- paper
- straws
- sticky tape

Follow the instructions at: www.redtedart.com/straws-circle-paper-planes-s-t-e-m-kids/ to make a hoop glider.

Throw it three times and measure the distance of each flight. Which was the furthest?

Next, make a prediction then answer one of these questions by changing something about your design:

- Does the position of the hoops on the straw affect the distance it flies?
- Does the length of the straw affect the distance it flies?
- Do more hoops help the glider fly better?
- Do the hoops need to be aligned in order for the glider to fly well?

If you're interested, you can find more information about how these gliders fly at: <https://sciencebob.com/the-incredible-hoop-glider/>.

Bees and Butterflies

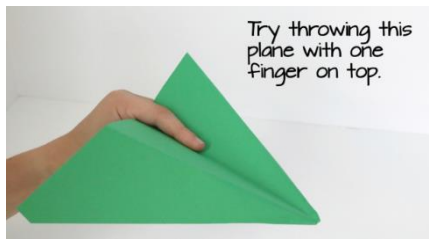
Which aeroplane design travels the furthest?

Today, you are going to be testing how far four different aeroplane designs travel. You are aiming to find the design which travels the furthest.

You will need:

- Paper
- Paperclip
- Stapler

To start: Follow the instructions (and videos) provided at <https://frugalfun4boys.com/how-to-make-awesome-paper-airplanes/> to make 4 different aeroplane designs – the rocket, the falcon, the super glider and the bulldog dart.



In order for your investigation to be a fair test, you only change one thing, in this case, the aeroplane design. Everything else must stay the same, e.g. type and size of card used, same amount of force used to throw the plane, same angle of release, etc.

Once you have your 4 aeroplane designs, test which of these designs travels the furthest by finding a suitable testing location, for example, the garden, a local field, etc. Throw each aeroplane design THREE times before taking the longest distance as the final result.

Complete the table below:

Aeroplane name	Test 1 (cm)	Test 2 (cm)	Test 3 (cm)	The longest distance out of all 3 tests (cm)
<i>Example</i>	92cm	64cm	78cm	92cm
<i>The Rocket</i>				
<i>The Falcon</i>				
<i>The Super Glider</i>				
<i>The Bulldog Dart</i>				

Which aeroplane design travelled the furthest?

Why do you think this design won?

What would happen if you used card to make your aeroplanes? Would this change the results?

Friday's Science Challenge – Changes using Science

For today's challenge, we are going to answer the question,

‘What can you change using science?’

Changes can happen by heating, cooling, freezing, mixing, wetting, drying, dyeing or applying a force.

You will need to show or explain:

- 1) What it was like before
- 2) What it was like afterwards
- 3) Why it changed.

For example:



Chocolate before



Chocolate after

The chocolate changed from a solid to a liquid because heat was added to it.

Why it changed

You can present this however you want to – take photos, film a video or write about the change that has happened.

Hedgehog Class

First, complete the whole school task. Now try this.

Vanilla ice cream in a bag

You will need:

- 1 small zip-lock bag
- 1 large zip lock bag
- ½ cup double cream
- ½ cup whole milk
- 1tbsp sugar
- 1.5tsp vanilla essence
- Ice
- ¼ cup salt



Method:

- Add milk, cream, sugar and vanilla to the small bag and seal removing excess air.
- Fill the large bag approx. $\frac{1}{2}$ full with ice and add salt.
- Place the small bag inside the large bag and seal
- Agitate the bags to mix the contents of the smaller bag. Keep mixing for approx. 10mins or until desired consistency.
- For best result place in freezer for 10mins before eating.

What do you notice? What is the same? What is different?

You can experiment with different types of milk to see how the results vary.

Swift Class

First, complete the whole school task.

Now what happens when you mix materials together?

How to Make Oobleck (Goop)

Materials:

- Cornstarch or Cornflour
- Food Coloring
- Water
- Bowl and spoon for mixing

Basic ratio: 2 parts cornstarch to 1 part water

- Combine 1 $\frac{1}{2}$ cups cornstarch and $\frac{3}{4}$ cup water in a large bowl.
- Add in some food coloring and stir to combine.
- The consistency you are aiming for: You should be able to press a handful of goop into a ball in your hand and it will feel solid. As soon as you release the pressure the ball should “melt” back into a liquid.

Is this change reversible (a change that can be undone) or irreversible (a change that is not able to be undone)?

You can pour the mixture into an ice cube tray. Freeze overnight. What happens? Is this change reversible (a change that can be undone) or irreversible (a change that is not able to be undone)?

Bee Class

First, complete the task at the top of the page.

Next, let's make our own drinks dispenser!

You will need:

- A balloon
- A plastic bottle
- A straw
- Water
- A small container, such as a glass



Method:

- 1) Carefully make a small hole about half way up the bottle and push the straw through the bottle leaving $\frac{1}{2}$ on the outside.
- 2) Fill the bottle about $\frac{3}{4}$ full with water.
- 3) Blow up the balloon, twist and seal the neck with a peg. Carefully place the end of the balloon on the bottle neck and put a glass under the straw.
- 4) When you're ready remove the peg and watch as the water shoots out of the straw into your glass. Be careful as it might shoot out further than you expect!

What is the change happening here?

The change happening here is the air pressure! This works because air presses down equally on the water in the bottle and in the straw when the balloon is pegged but when the peg is removed, air from the balloon increases the air pressure in the bottle pushing down on the water, forcing it through the straw.

Butterflies Class

Once you have completed the task on the first page, have a go at this!

Ice cream in a bag!

You will need:

- A larger zip-lock bag
- A smaller zip-lock bag
- Two-three trays of ice cubes
- 6 tbs of table salt
- Warm gloves/a towel
- One cup of milk (either flavoured or with added sugar/vanilla essence)



Method:

- 1) Pour half a cup of milk (flavoured or with added sugar/vanilla essence) into the small zip lock bag (I tested with non-ziplock food bags tightly tied and it was successful!).
- 2) Put a generous amount of ice into the large zip-lock bag, then add 6 tbs of salt (the salt lowers the freezing point of the ice and you will see the ice begin to melt).
- 3) Place the bag of milk inside the bag of ice and salt and seal.
- 4) Put on some gloves (or cover with a towel because it will get very cold!) and gently shake, squeeze and roll the bag.
- 5) After five minutes of shaking and rolling, carefully take the small bag out and taste your ice cream! Be careful not to spill any of the salty ice water or mix it with your ice cream!



What is the change happening here?

Pure water freezes at 0 degrees Celsius. Add salt and the freezing point drops! When you add salt to the ice in the outer bag, the ice (at 0 degrees Celsius) is now above its freezing point - so it begins to melt. Melting requires energy, and in this case, the energy comes from the milk in the inner bag. Ice crystals then start to grow in-between the tiny globules of fat in the milk and bubbles of air, causing the milk to freeze and change state!



Find the secret word!

- * Walk around the ***church grounds***, over the stile and through to ***Cooper's Green***.
- * Identify the ***labelled trees*** by looking at the leaf, bark and fruit. Use the ***Leaf ID*** sheet to help you.
- * Collect the **giant** letters on the signs.
- * Unjumble the letters to make a secret word.

Write down the letters you have collected in the box below:



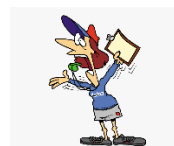
CLUES: It is a ***compound*** word made from two known words.
It isn't very nice to be called this if you are in a race!

Can you ***unjumble*** them to make a word?

--	--	--	--	--	--	--	--	--



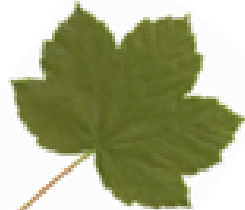
Picture clues



leaf ID



Oak



Sycamore



Holly



Horse Chestnut



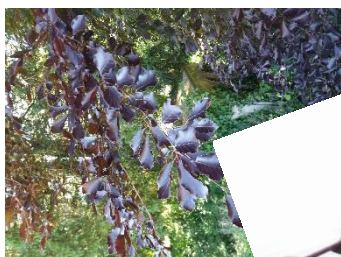
Lime



Ash



Cherry



Copper Beech



Yew



Virtual School Trip

Although we are currently unable to go on a school trip, we are not going to let that stop us! We are all going to go on a virtual school trip from the comfort of our home to Chester Zoo.

Firstly, head to the Chester Zoo website:


<https://www.chesterzoo.org/>

Scroll down until you find the virtual zoo section.



Now, take your time to explore the zoo. Watch the virtual zoo day videos, look at the photographs of the animals they have at the zoo and generally explore the website like you would explore each section of the zoo if you were there.

Finally, I would like you to send a postcard to your teacher from Chester Zoo sharing your three best activities. For example,

<p>Dear Mrs Anderton,</p> <p>Today, I went on a school trip to Chester Zoo. It was fantastic!</p> <p>My three favourite activities were:</p> <ul style="list-style-type: none">• Seeing the Sumatran orangutan with her little baby.• Looking at the pattern on the jaguars' bodies while they were eating their lunch.• Watching the VERY cute baby penguin chicks being weighed. <p>What a fun day! Love, Joshua</p>	 <p>Mrs Anderton</p> <hr/> <p>Swaffham Prior Primary School</p> <hr/> <p>Swaffham Prior</p> <hr/> <p>CB25 0LG</p> <hr/>
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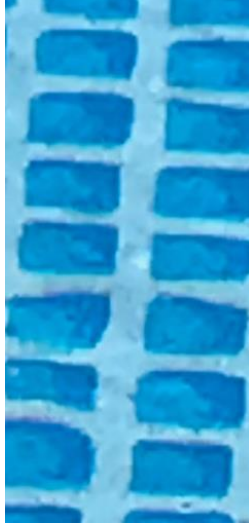
Virtual School Trip – Postcard Template

Zoomed-in Photo Competition

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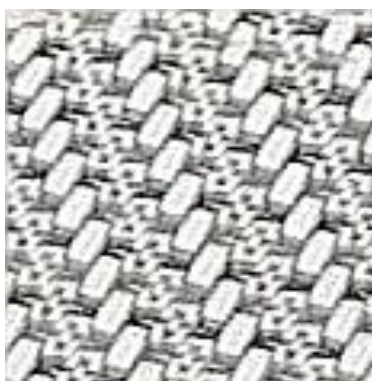
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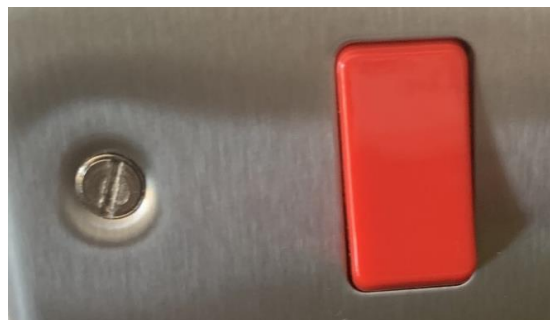
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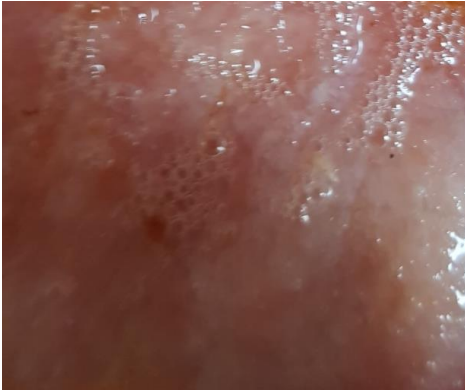
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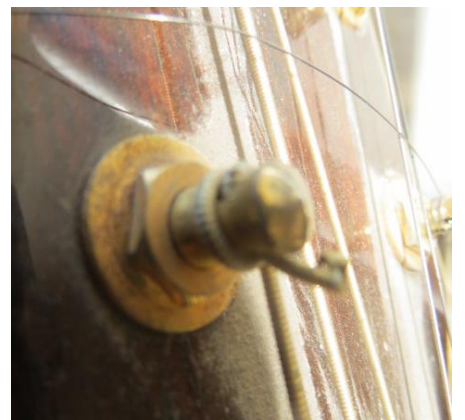
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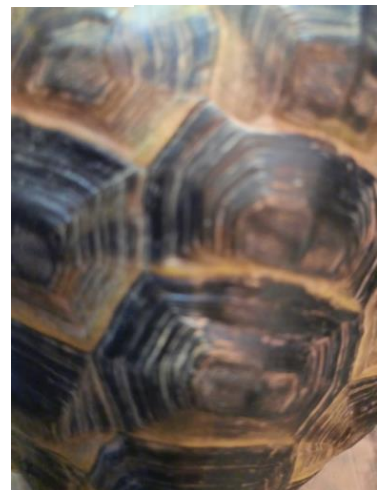
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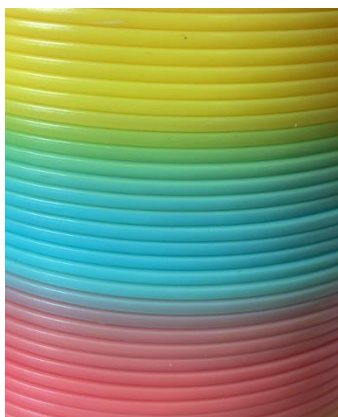
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Competition Entry Form

With the help of your family, relatives and friends, look at the zoomed-in photos and work out what they are. Write your answer next to the correct number below. Take your completed entry form to school or email to kanderton@swaffhamprior.cambs.sch.uk by Friday 3rd July – there will be a prize for the most correct answers. Good luck!

Name:

Class:

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VIRTUAL SCIENCE FAIR

As explained last week in the letter, we would like to create an online space where children can share their science experiments. Last year we loved seeing children presenting their experiments and explaining them to others so knowledgeably. Although we can't do this in person this year, we would still love to create a space for children to present their learning.

What We Would Like

Children to do some research, carry out an experiment and then document it in some way. This could be photos, PowerPoint, video or a word document. The idea is that these will be uploaded by Friday 3rd July at noon so that in the afternoon everyone can spend the afternoon looking at each other's work.

So, we have created a Shared GOOGLE DRIVE to store their creations.

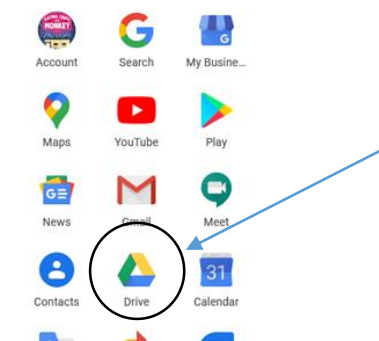
Saving the Clips / Photos / Docs / PPTs

I have set up a folder called (wait for it) **VIRTUAL SCIENCE FAIR** in a shared **Google Drive**. This will be the easiest way for you to share large-memory files like videos, and for us to access them. **Please don't send them via dojo as they can't be shared by others.**

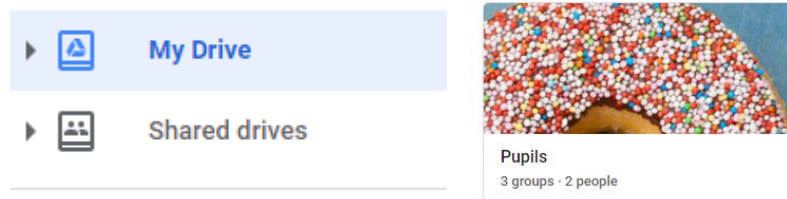
How to access Google Drive

- 1) We will send you a username and password for your child via a message on Class Dojo
- 2) Go to Google.co.uk.
- 3) Click on the blue "sign in" icon in the top right-hand corner of the screen.
- 4) Enter your child's username and password.
- 5) Click on the 9 grey squares in the top right-hand corner of the screen.
- 6) Select DRIVE from the menu.

Sign in



- 7) Select SHARED DRIVES from the menu on the left-hand side. Then select the PUPILS drive.



- 8) You will find the folder for this project (**VIRTUAL SCIENCE FAIR**), where you can save all of your videos and pictures.
- 9) For ease of viewing, please name each video / document / photo /PPT with your child's name and what it's a video of (e.g. Trevor memory experiment; Veronica splitting the atom; Jimbo funny bone).

Actions

- Carry out a science experiment
- Document it
- Upload it to Google Classroom – Virtual SCIENCE FAIR folder (instructions above)
- **Deadline: Friday 3rd July.**

Thank you so much for your support.

Mrs Anderton and Mrs Bartley

Kitchen Science Ideas

If you would like more science experiments, here are some using equipment you can find around your house.

Making Music with Water

Have you ever tried making music with glasses or bottles filled with water? Experiment with your own special sounds by turning glasses of water into instruments and make some cool music.

You will need:

- 5 or more drinking glasses or glass bottles
- Water
- Wooden stick such as a pencil or wooden spoon

Method:

1. Line the glasses up next to each other and fill them with different amounts of water. The first should have just a little water while the last should almost full, the ones in between should have slightly more than the last.
2. Hit the glass with the least amount of water and observe the sound, then hit the glass with the most water, which makes the higher sound?
3. Hit the other glasses and see what noise they make, see if you can get a tune going by hitting the glasses in a certain order.

Blowing Up Balloons With CO₂

Chemical reactions make for some great experiments. Make use of the carbon dioxide given off by a baking soda and lemon juice reaction by funnelling the gas through a soft drink bottle and in to your awaiting balloon!

You will need:

- Balloon
- About 40 ml of water (a cup is about 250 ml so you don't need much)
- Soft drink bottle
- Drinking straw
- Juice from a lemon
- 1 teaspoon of baking soda

Method:

1. Before you begin, make sure that you stretch out the balloon to make it as easy as possible to inflate.
2. Pour the 40 ml of water into the soft drink bottle.
3. Add the teaspoon of baking soda and stir it around with the straw until it has dissolved.
4. Pour the lemon juice in and quickly put the stretched balloon over the mouth of the bottle.

Bending Water with Static

Here's an easy and fun science experiment that's great for helping learn about static electricity. Try bending water with static electricity produced by combing your hair or rubbing it with an inflated balloon.

You will need:

- An inflated balloon
- A narrow stream of water from a tap
- Dry hair

Method:

1. Turn on the water so it is falling from the tap in a narrow stream (just a few millimetres across but not droplets).
2. Rub the balloon back and forth against your hair for a few seconds.
3. Slowly move the balloon towards the stream of water (without touching it) while watching closely to see what happens.

Mixing Oil and Water

Some things just don't get along well with each other. Take oil and water as an example, you can mix them together and shake as hard as you like but they'll never become friends.....or will they?

You will need:

- Small soft drink bottle
- Water
- Food colouring
- 2 tablespoons of cooking oil
- Washing up liquid

Method:

1. Add a few drops of food colouring to the water.
2. Pour about 2 tablespoons of the coloured water along with the 2 tablespoons of cooking oil into the small soft drink bottle.
3. Screw the lid on tight and shake the bottle as hard as you can.
4. Put the bottle back down and have a look, it may have seemed as though the liquids were mixing together but the oil will float back to the top.