



SCIENCE SPECIAL EDITION NEWSLETTER

February 2022



Stay tuned for a fun-packed issue!

Spring 2022 at Stillness has injected a 'spring' into the steps of all the children as we have aimed to provide stimulating and thought provoking lessons throughout the course of the year so far. Our vision is that we provide opportunities for the children to question, test, prove a variety of theories and make scientific connections across the curriculum. See below for this year's overview which can also be viewed on our website.

	AUTUMN TERM	SPRING TERM	SUMMER TERM
YEAR 3	<p>AUTUMN 1 Animals including humans – the diet of humans and animals and how they use their skeletons for support, protection and movement.</p> <p>AUTUMN 2 Forces and magnets – movement of objects on different surfaces, magnetic forces and magnetic materials.</p>	<p>SPRING 1 Rocks – sorting and classification of different types of rocks, how fossils are formed and what soils are made from.</p> <p>SPRING 2 Light – why we need light, how it is reflected, the hazards of the sun and how shadows are formed.</p>	<p>SUMMER 1 Plants – identification of plant parts and their functions, the plant life cycle and how water is transported.</p> <p>SUMMER 2 Sex and Relationships Education - differences between males and females, personal space and different families.</p>
YEAR 4	<p>AUTUMN 1 Animals including humans – functions of the basic parts of the human digestive system, different types of teeth and their functions and food chains.</p> <p>AUTUMN 2 States of matter – classification of different materials – solids, liquids and gases and their changing states.</p>	<p>SPRING 1 Electricity - common electrical appliances, simple circuit making and the variables that affect the strength of a circuit.</p> <p>SPRING 2 Sound – how sounds are made, sound travel and how it is produced.</p>	<p>SUMMER 1 Living things and their habitats – classification of living things in the local and wider environment and how they change over time.</p> <p>SUMMER 2 Sex and Relationships Education – the human life cycle, basic facts about puberty and the link between puberty and reproduction.</p>
YEAR 5	<p>AUTUMN 1 Earth and Space – movement of the planets in the solar system and how day and night is formed.</p> <p>AUTUMN 2 Properties and changes in materials – classification of materials based on their properties and the conducting of fair tests to demonstrate this.</p>	<p>SPRING 1 AND SPRING 2 Living things and their habitats – differences between some life cycles and reproduction in plants and animals.</p>	<p>SUMMER 1 Forces - the effect of gravity on objects and identifying, understanding and demonstrating the different forces.</p> <p>SUMMER 2 Sex and Relationships Education - describing how the body changes during puberty, exploring the process of emotional and physical change and exploring positive and negative ways of communicating in a relationship.</p>
YEAR 6	<p>AUTUMN 1 Electricity – investigating how the strength of the components of a circuit affects the bulbs and buzzers and using symbols to represent components.</p> <p>AUTUMN 2 Evolution and inheritance – how living things have changed over time, how fossils are formed and how living things reproduce offspring that vary.</p>	<p>SPRING 1 Living things and their habitats - classification of micro-organisms, plants and animals based on similarities and differences.</p> <p>SPRING 2 Animals including Humans - the main parts of the human circulatory system and describing their functions, describing the ways in which nutrients and water are transported within animals and humans.</p>	<p>SUMMER 1 Light (how we see things) – how light travels and why shadows are formed</p> <p>SUMMER 2 Sex and Relationships Education describing how the body changes during puberty, exploring the process of emotional and physical change and exploring positive and negative ways of communicating in a relationship.</p>



Special thanks to Adora – Dali class – for designing this incredible header.

'I loved our Science Topic Properties and Changes in Materials' as we learnt that when we mix solids and liquids it can make a gas and we did lots of experiments which made Science fun and enjoyable. '

'In Science, I enjoy it when we get to do experiments as it helps me to understand how things work. I also like how we sometimes play a few games that are to do with the topic. For example: when we were doing classification, we played a game in groups before the lesson.'

'I like Science because it is fun learning about lots of different things, especially when they involve the environment or nature. Another really fun thing is when we do some experiments because it helps me to understand the reason behind the lesson and it involves me more. I also like learning about electricity and other technical things as it is fun to do some electrical stuff. In addition, it is fun doing the experiments with wires, bulbs and motors.'

'I think it was fun going around the classroom looking for magnetic objects. I liked investigating different objects to find out if they were magnetic or not.'

'In Science, I have enjoyed learning about magnets.'

'I think Science in Year 5 is very important as we have great topics and our teachers set up lots of activities and videos for us to enjoy. We also get really involved in the learning. My favourite topic was Earth and Space because we learnt the distance between time and Earth and all the different eclipses. We also went on some epic Science trips like the Royal Observatory where we learnt about moons and looked at all the planets close up. Science has been cool so far this year!'

'This year, I have enjoyed Science as we have been doing more experiments and have been able to go on more Science trips.'

'In Science, I enjoy all the fun experiments and workshops. The topics that the teachers use are super!'

'This year in Science, I enjoyed learning about the human body.'

'I enjoyed holding the rocks and looking at them with a magnifying glass. It helped me to discover similarities and differences between the different rocks.'

'This year, I have enjoyed organising biscuits in Science when we learned about evolution and I also liked building the alarm systems when we doing electricity.'

SCIENCE AT PLAY









SIZZLING EXPERIMENTS FOR STILLNESS SCIENTISTS

***Why not try these experiments in the comfort of your own home?
You're guaranteed to see Science at work!***

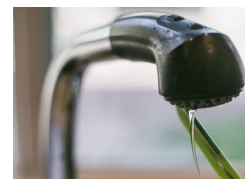
Bend Water With Static Electricity

You will need:

- A dry plastic comb
- An tap
- A head full of clean dry hair.

Instructions:

1. Turn on the tap and slowly turn down the water until you have a VERY thin stream of water flowing.
2. Take the plastic comb and brush it through your hair ten times.
3. Now slowly bring the comb close to the flowing water, (without actually touching the water). If all goes well, the stream of water should bend towards the comb!



Baking Soda & Vinegar Volcano

You will need:

- Baking Soda (make sure it's not baking powder)
- Vinegar
- A container to hold everything and avoid a big mess!
- Paper towels or a cloth (just in case)

Instructions:

1. Place some of the baking soda into your container.
2. Pour in some of the vinegar.
3. Watch as the reaction takes place!



Make an Egg Float in Salt Water

What you'll need:

- One egg
- Water
- Salt
- A tall drinking glass



Instructions:

1. Pour water into the glass until it is about half full.
2. Stir in lots of salt (about 6 tablespoons).
3. Carefully pour in plain water until the glass is nearly full (be careful to not disturb or mix the salty water with the plain water).
4. Gently lower the egg into the water and watch what happens.

Gravity-free water

What you'll need:

- A glass filled right to the top with water
- A piece of cardboard



Instructions:

1. Put the cardboard over the mouth of the glass, making sure that no air bubbles enter the glass as you hold onto the cardboard.
2. Turn the glass upside down.
3. Take away your hand holding the cardboard.

SCIENCE-TASTIC RIDDLES

1. I am a rock bigger than Venus but smaller than Uranus. What am I?
2. You cannot see me, I cannot be touched, you cannot feel me but I can cook your lunch. What am I?
3. What is the centre of gravity?
4. I was once a massive star and soon I will be a brightly coloured gas cloud. For now, I am a massive explosion. What am I?
5. What is a Priest's favourite part about Physics?
6. What planet has the shortest year?
7. Give me food and I will live. Give me water and I will die. What am I?
8. What are the only two periodic elements to have a liquid state?
9. What periodic element do pyromaniacs love the most?
10. I am a gas and line-up with neon. I am also the home of a superhero. What am I?
11. What chemical element doesn't like to follow?
12. What do dogs have that no other animal has?
13. What can you hold no longer than a few seconds?
14. I was once an embryo but have now gone through eight weeks of development. What am I?
15. I am under your face and outside your mind. What am I?
16. I am needed for flight but cannot fly on my own. What am I?
17. I like to roam but always stay home. If you carried what I carried, you would break your back. What am I?
18. I can be good for you, I can be bad. You can find me all over your body. What am I?
19. I'm excellent to taste but horrible to smell. What am I?
20. What is neither water nor land but is always soaking wet?

ANSWERS

1. Earth
2. A microwave particle
3. The letter 'V'
4. A Supernova
5. Mass
6. Mercury, as it is closest to the Sun
7. Fire
8. Bromine and Mercury
9. Arsenic
10. Krypton
11. Lead
12. Puppies
13. Your breath
14. A fetus
15. Your skull
16. Feathers
17. A snail
18. Bacteria
19. Tongue
20. Wetlands