





Science Week 2021 05/03/21 - 14/03/21

This week sees us celebrating British Science Week. Here are some ideas for simple science experiments, investigations and activities that you could try at home this week. You could use the stories below to provide a context for the learning. We would love to see what you get up to so please share pictures with your teachers or the school office!

Music Makers	Sink the Foil Boat	Brilliant Bubbles!	Rainbow Magic
<p>This activity encourages children to think about how different sounds are made.</p> <p>For this activity you will need several glass jars or bottles.</p> <p>Put different amounts of water in each container, tap on the containers gently to see what sound they make. Can you put the containers in order from the lowest note to the highest note?</p> <p>You could try blowing across the top of the bottles to see how the sound changes. You could add coloured water to make your magical instrument look even better.</p> <p>Can you think of any other things you could use to make music?</p> <p>You could investigate why and how the water and containers make sounds.</p>	 <p>You will need:</p> <ul style="list-style-type: none"> • Kitchen foil • Tub of water / bath / sink • Marbles (or anything to act as a small weight e.g. 1p coin) <p>Instructions</p> <ol style="list-style-type: none"> 1) Use some tin foil to see if you can make a boat shape. 2) Test your boat on the water whilst it is empty to check it floats 3) Make a prediction - how many marbles/pennies will sink your boat? 4) Test your boat by adding your weights one at a time. Count how many it takes to sink your boat. <p>Will it need more or less weights if your boat is a different shape or size?</p>	<p>This activity encourages children to think about liquids, gases and bubbles.</p> <p>Put some bubble liquid in a bowl or tray. Use a straw to blow some bubbles. Try blowing gently and then blowing harder- how do the bubbles change?</p> <p>Find out how long you can keep a bubble for before it pops. Find out how long you can keep a bubble in the air. Can you find different ways to blow bubbles using things around your house?</p> 	<p>You will need:</p> <ul style="list-style-type: none"> • Kitchen paper towel • Felt tip pens • Two bowls of water • Paper clip  <p>Instructions</p> <ol style="list-style-type: none"> 1) Cut the kitchen paper into the shape of a rainbow 2) Attach the paper clip to the top of the rainbow and attach some thread to this (you don't have to do this bit but it might make it easier to hold) 3) Colour a rainbow with felt tip pens from the bottom of both the ends of the rainbows up about 2-3cm <p>Hold the rainbow over the water with the ends slightly in the water and watch the colours travel up the rainbow</p>
Sniffly sneezers	Be seen, Be safe		Ice Rescue
<p>This activity focuses on the strength and absorbency of materials.</p> <p>Try to find out which type of material would make the best hankie. Find some different materials around your home, put a piece of material in a tray, drip some coloured water onto the material. Does it soak up the water? Does the water come through? How can you make sure your test is fair? Can you think of a way to record your results?</p>	<p>This activity will get children thinking about reflection, light and the suitability of materials.</p> <p>Find out which materials you could wear to help you be better seen in the dark. Make a dark space by drawing the curtains. Collect some different materials from around your home e.g. tissue, foil, white fabric etc. Shine a torch onto the different fabrics, what do you notice? Which materials can you see best? Do some colours work better than others? How can you make your test fair? Can you design something that could be worn in the dark to keep you safe?</p>		<p>You will need:</p> <ul style="list-style-type: none"> • A container • Small plastic toys (e.g. lego men / animals) • Water • Freezer • Salt  <p>Instructions: Place your small plastic toys in the container and fill almost to the top with water. Leave in the freezer until it is frozen solid. Remove the container and set aside for 5-10min until it can be tipped onto a tray. What happens when you pour salt on your ice? What happens if you put some warm water on the ice? What do you think would be the fastest way to rescue your toys from the ice? How can you find out?</p>

Using these stories from Crest could help provide a context for the science investigations. They also have some challenge questions you could use with your child to encourage them to think about their learning in more depth.

Music Makers

AWARDS | STAR

Music Maker

Activity Card



Cosmic and Gem are having breakfast with Uncle Astro. Cosmic lifts the fruit juice out of the fridge. Clunk goes the bottle as he puts it down.



Gem has an idea. She begins to tap things gently with her spoon. Clink, clink, clink goes her mug. Plunk, plunk, plunk goes the teapot. Clung, clung, clung goes the fruit juice bottle. Tink, tink, tink goes Cosmic's glass.

"What a marvellous music maker you are this morning, young Gem," says Uncle Astro, as he tips tea into the mugs.

"Hey, that was a different tune! How did you do that?" asks Cosmic.
 "I don't know," says Gem. "I'm not sure either," Uncle Astro adds. "Let's find out and then we can play a tune."

Cosmic fills his glass almost to the brim with orange juice. "Play it again, Gem," he says. So Gem plays again. Chunk, chunk, chunk goes her mug. Plink, plink, plink goes the teapot. Cling, cling, cling goes the fruit juice bottle. Tunk, tunk, tunk goes Cosmic's glass.

Gem thinks the note will be higher when the fruit juice bottle is nearly empty
 Cosmic thinks the note will be higher when the fruit juice bottle is nearly full
 Uncle Astro thinks the size of the bottle makes a difference

Have you ever made music by tapping things?

Did you find ways to change the sound?

Brilliant Bubbles

Cosmic is very excited. Today is his birthday! His present is a big, bright purple bubble machine. When he turns the handle, dozens and dozens of bubbles float into the air.

His friend Gem arrives to wish him a happy birthday. Cosmic shows Gem his new bubble machine.

"What lovely bubbles!" Gem shouts, as she jumps about trying to catch them.

"They are OK," says Cosmic. "But they are all the same shape... And they are all the same size... And they are all the same colour. I wanted lots of different bubbles, but these are all the same."

"You must be able to make different bubbles," says Gem, peering into the end of the machine. "Perhaps there's something wrong with it."

"I'm not sure," says Cosmic.

What do you think?

Your challenge

Can you find a way to blow different bubbles for Cosmic?

Cosmic thinks you can make bubbles with different shapes

Gem thinks you can make different size bubbles

Aunt Stella thinks you can make different colour bubbles



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Be Safe, Be Seen

Be Seen Be Safe

Activity Card

It is a great day for Gem. Her new bike has arrived. She is going for a ride with Cosmic to visit Aunt Stella. She puts on her favourite black tracksuit and pedals off to meet Cosmic. A little later, Aunt Stella is SO worried. It's gone as dark as night outside. Where are they?

Suddenly there's a loud knock, rat-a-tat-tat, on the door.

Oh no! It's a policeman with Gem and Cosmic. They are looking very sheepish.

"I nearly knocked these two off their bikes," grumbles the policeman. "They were riding round, no lights and just look at what they are wearing! No wonder I couldn't see them."

"Oh dear!" says Aunt Stella. "We need to make sure you can be seen and be safe in the dark. Now I wonder what we could do? I think we may need some help."



Your challenge

Find out if Gem and Cosmic can wear something that will help them to be better seen in the dark.

Cosmic thinks they need to wear something shiny
Gem doesn't think what we wear makes a difference
Aunt Stella thinks they need to wear something white

What do you think?

Discuss

- Why do you think Gem and Cosmic couldn't be seen?
- Was it just because they didn't have lights on their bikes?
- Have you noticed what you can see in the dark?
- How will you find out if different materials can be seen in the dark?
- What will you do to make sure it is a fair test?

Sniffly Sneezers

Sniffly Sneezes

Activity Card

Gem grabs her hankie. Achoo! Achoo! Achoo!

She holds her hankie to her nose and sneezes three more times. "Oh dear, what a horrible sniffly sneeze!" she sighs, tucking her hankie into her pocket. Now her nose is running! She needs to wipe it quickly. Gem pulls out her hankie again and rubs her nose. This isn't any fun.

There's a knock at the door. It's Cosmic. He's brought Gem a lolly to cheer her up.

Cosmic looks at Gem, "Your nose is all red," he says. "You look like a clown!" Gem sighs again. "It's my hankie. It doesn't work very well. I wish I had a better one."

"OK," says Cosmic cheerfully. "I'm sure we can find something. Let's ask Aunt Stella to help us. She will have lots of things we could try. But how will we know which is best?"

Aunt Stella says she thinks a hankie needs to be strong when it's wet. Cosmic thinks a hankie needs to be soft on your nose, and Gem thinks it needs to soak up water to keep your nose dry.

Have you ever had a cold?
What kind of hankie did you use?



Your challenge

Gem needs to know which hankie to use.
She has lots of things to try.
Can you help her?