

RC SCIENCE PROJECT TASKS – April 2020

SHOWBIE – Please use the SHOWBIE class – 35JE4

<p>ALL STUDENTS KS3,4 & 5!</p> <p>(There are three age categories (7-11, 12-14, and 15-18)</p>	<p>ART WORK Biological specimen drawing competition</p>	<p>Fantastic opportunity for all budding (and accomplished!) artists - The Nancy Rothwell Award celebrates specimen drawing in schools and highlights the benefits of combining art and science. See website for more details and contact Mr McAlonan for ideas and guidance.</p> <p>https://www.rsb.org.uk/get-involved/rsb-awards/nancy-rothwell-award and the terms of entry found here https://my.rsb.org.uk/item.php?competitionid=35</p> <p>Don't worry about entering just yet, get designing, drafting and drawing and submit to Showbie or Mr McAlonan (or your art teacher) for feedback.</p>
<p>KS3</p>	<p>Body Builder (Biology) Online extended learning project with interactives and an against the clock challenge</p>	<p>Three parts –</p> <ul style="list-style-type: none"> • Body fact file - key facts on where each organ or bone is and what their function is • Interactive body builder - test your knowledge by dragging and dropping the bones or organs into the correct location • Against the clock - a real test of speed <p>https://www.abpischools.org.uk/topic/bodybuilder/1/1</p> <p>Use this resource to build up a project about the bones and organs of the body. You could make a 'Goodnotes' or other folder with screenshots of your work or simply post you completed time for the challenge and we can compare with others in the school – Good luck!</p>
<p>KS3</p>	<p>Interactive periodic table (Chemistry) – build your own and periodic table game</p>	<p>Produced by ABPI this interactive game allows students to explore trends in the properties and behaviour of different elements, and develop their understanding of the patterns of the Periodic Table.</p> <p>https://www.stem.org.uk/resources/elibrary/resource/25345/interactive-periodic-table</p> <p>Please submit completed periodic table to the Showbie folder or submit screen shots of your work.</p>
<p>KS3</p>	<p>Home practicals – do try this at home!</p>	<p><u>This set of twelve colourful postcards</u> provides hands on activities which link to the topics of electricity, sound, forces, and changes of state.</p> <p>Two cartoon characters, Marvin and Milo demonstrate the fun experiments. They include: Alka -Seltzer rockets, magic balloon, making a lava lamp, musical coat hanger, making a foil boat and many more. This resource has been provided by the Institute of Physics.</p>

		<p>https://www.stem.org.uk/resources/elibrary/resource/25416/do-try-home</p> <p>We want to see pictures! Post you practical pics onto Showbie, don't worry if they didn't go to plan – that's Science!</p>
Y8 and 9	Practical Chemistry at home	<p>How to Do Chromatography with Candy and Coffee Filters</p> <p>https://www.thoughtco.com/chromatography-with-candy-and-coffee-filters-604269</p> <p>Please try! Again, we want to see the results – no matter how it turns out! Please post pics on Showbie.</p>
Y9 and Y10	Breathing and Asthma (Biology) – extended learning project (linked to the GCSE curriculum)	<p>This is an extended learning project. Use the resources – 10 parts full of diagrams, keywords, animation, interactives and a quiz.</p> <p>https://www.abpischools.org.uk/topic/breathingandasthma/1/1</p> <p>You could use this to make your own set of 'Goodnotes' or a power point on gaseous exchange with completed diagrams etc.</p> <p>Please submit completed work and/or screen shots of work to Showbie</p>
KS4 (and some y9s and 12s?!))	Genetics – investigating Zebra fish traits	<p>Step into the shoes of a genetic scientist and carry out a phenotype analysis with the model organism, zebrafish.</p> <p>https://www.yourgenome.org/activities/spot-the-difference-zebrafish</p> <p>In this activity you will carry out an analysis of the physical characteristics (phenotype) of zebrafish with different mutations in their DNA. You will compare zebrafish containing a specific mutation to zebrafish without the mutation, also known as the 'wild type'. This will help you to characterise the effect of the mutation on the animal's phenotype. Multi step project with lots of activities and resources to challenge and stimulate...</p> <p>Upload your work, pictures and conclusions onto Showbie.</p>
Y11 and Y12	Physics – Using motion equations to investigate RTAs	<p>A Catalyst article about road traffic accidents (RTAs). After the accident police and other investigators try to establish what went wrong. This may be with a view to prosecuting a motorist, or simply in an effort to improve road safety. An understanding of the physics of motion plays a large part in such investigations.</p> <p>https://www.stem.org.uk/resources/elibrary/resource/27572/investigating-rtas</p> <p>Use the text, worked examples and external links to make your own report on the physics of road traffic accidents... Submit any work onto Showbie.</p>

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