Science Over the Summer

Have a great summer!

Science Department

Activity	Link
London Natural History Museum – Virtual Museum Delve into the Museum from home with a virtual self-guided tour of the galleries, an interactive experience about Hope the blue whale and audio guides narrated by Sir David Attenborough.	https://www.nhm.ac.uk/visit/virtual-museum.html
London Science Museum – Virtual Museum Explore the science museum with a virtual tour on Google Streetview or enjoy a curated tour of the museum. You can also explore their 325,000 object in amazing detail!	https://www.sciencemuseum.org.uk/virtual-tour-science-museum
Washington D.C Natural History Museum – Virtual tours The Smithsonian National Museum of Natural History virtual tours allow visitors to take self-guided, room-by-room tours of select exhibits and areas within the museum from their desktop or mobile device	https://naturalhistory.si.edu/visit/virtual-tour
Washington D.C Natural History Museum – Summer Explorations Join a free virtual summer program series that allows you to explore the world of natural history science in a fun and interactive way! Each week they will explore a different natural science-based theme and provide a suite of daily live webinars, videos, activities, and projects.	https://naturalhistory.si.edu/education/natural-history-summer-explorations
WWF Activities for pupils Take inspiration and ideas from their hub of seasonal and fun creative activities that are designed to encourage pupils to get outside, get creative using recycled materials, and learn about nature and sustainability.	https://www.wwf.org.uk/get-involved/schools/activities
CERN – Virtual Visits 'Visit' the site of the Large Hadron Collider – the world's largest and most powerful particle accelerator. A variety of interactive activities including virtual reality videos and tours of the site.	https://visit.cern/tours/virtual-visits https://visit.cern/discover-cern-online
Chester Zoo – Virtual Zoo Take part in one of many virtual tours of Chester Zoo which broadcasted the zoo whilst in lockdown.	https://www.chesterzoo.org/virtual-zoo-2/
Edinburgh Zoo – Animal information and live webcams Find out about all the animals that live in Edinburgh Zoo and there are live webcams of the animals so you can see what they are up to!	https://www.edinburghzoo.org.uk/animals-and-attractions/animals/
London Zoo – Virtual Zoo and Live Talks Visit the animals, and their hardworking keepers, in real time. Gain an unedited snapshot of what goes on day to day – the cleaning, the caring, the	https://www.zsl.org/zsl-london-zoo/virtual-london-zoo

Activity	Link
surprises and the affection. Enjoy the animals in all their unpredictable, quirky ways and check in with the teams still there, on site, looking after their animals.	https://www.zsl.org/zsl-london-zoo/whats-on/live-from-zsl-london-zoo
Virtual Planetarium and solar system discovery show The Universe is a vast and intriguing place, and this show explores our own little corner of it: the Solar System. Starting from our home planet, the Earth, you'll travel through our celestial neighbourhood, visiting objects like planets, moons and asteroids, and ending with a fly-out to view our galaxy, the Milky Way.	https://www.rmg.co.uk/whats-on/solar-system-discovery-virtual-planetarium-show Times you can book Thursday 23 July | 12pm - 1pm, 2pm - 3pm, 3pm - 4pm Friday 24 July | 11am - 12pm, 12pm - 1pm, 2pm - 3pm
Kew Gardens – Virtual tour into the glasshouses Travel to the tropics, the desert and the mountains without leaving the house with their seasonal footage and a sneak peek at their glasshouses across Kew and Wakehurst.	https://www.kew.org/about-us/virtual-kew-wakehurst
Google Expeditions – Virtual Reality Tours and Augmented Reality Expeditions explore history, science, the arts, and the natural world. Whether you're roaming with dinosaurs or taking a look at Renaissance sculptures, there's something amazing to explore for every subject.	https://edu.google.com/products/vr-ar/expeditions/?modal_active=none To experience VR cheaply you can order a product called "google cardboard" which lets you turn your smart phone into a VR headset with some self-assembly.
NASA – Citizen Science Projects & Other Activities NASA's citizen science projects are collaborations between scientists and interested members of the public. Through these collaborations, volunteers (known as citizen scientists) have helped make thousands of important scientific discoveries.	https://science.nasa.gov/citizenscience https://www.nasa.gov/stem/forstudents/5-8/index.html https://spaceplace.nasa.gov/
Dyson Challenge Cards Can you skewer a balloon without popping it? Coat a nail in copper? What happens when you plug a clock into a potato? Dyson engineers have designed these challenges specifically for children. Ideal for home or in the classroom, they encourage inquisitive young minds to get excited about engineering.	https://www.jamesdysonfoundation.co.uk/resources/challenge-cards.html
Learn.Genetics – An introduction to genetics and biology Explore a range of resources all aimed at explains the basics of biology and genetics. Activities to complete as well as learning if you want to learn something new.	https://learn.genetics.utah.edu/
Institute of Physics – Moon Adventure What's it like to be an astronaut? Where did the Moon come from? What's the future of humans in space? Click to find out more!	https://beta.iop.org/moon?_ga=2.10362485.1926302531.1594071685-507043688.1594071685
Royal Institute – Experiments and Practicals	https://www.rigb.org/families/experimental

Activity	Link
A series of short films making it fun, easy and cheap to do science experiments at home with your family.	
STEM – Massive list of activities for all ages A range of fun, hands-on activities for families to use at home, suitable for all ages from 4 to 16.	https://www.stem.org.uk/home-learning/family-activities
Discovering Antarctica Take a journey through this site and begin discovering Antarctica for yourself. Each section features activities, images, video clips and fact sheets, to help you learn about this distant, frozen wilderness.	https://discoveringantarctica.org.uk/
Scouts – The Great Indoors While Scouts normally love the great outdoors, they've pulled together some inspired indoor activity ideas to keep you entertained while schools are closed due to coronavirus.	https://www.scouts.org.uk/the-great-indoors
British Science Week 2020 Pack The theme for the British Science Week 2020 activity packs and poster competition was 'Our diverse planet.' Even though the week is over, the packs contain lots of activities on this theme, with anything from biological diversity and social diversity, to the diversity of knowledge and STEM careers.	https://www.britishscienceweek.org/app/uploads/2020/01/BSA_BSW_secondary_1119v13.pdf
Lockdown Science Here you will find the experiments you can do at home. All very low-tech. No fancy equipment. Just what's in the cupboard and the fridge, and some fun for kids.	https://www.lockdownscience.com/
Tynker – Learn to code Tynker provides everything needed to learn computer programming in a fun way. Tynker offers self-paced online courses for children to learn coding at home.	https://www.tynker.com/dashboard/student/#/dashboard
TEDEd – Online learning videos Allows students to search for lectures — recorded or animated — on subjects of interest or sign up for a daily email of lesson plans that span all subjects and age groups.	https://ed.ted.com/lessons?category=science-technology&direction=desc&sort=featured-position
WildEarth – Live Safaris WildEarth's safariLIVE is an award winning, expert hosted LIVE safari, broadcast directly from the African wilderness into your home.	https://wildearth.tv/safarilive/ Sunrise Safari: 5:30am-8:30am Sunset Safari: 2pm-5pm Every day of the week
Monterey Bay Aquarium – Live Cams Be delighted by the antics of the sea otters or mellow out to the hypnotic drifting of jellies. With ten live cams to choose from, you can experience the wonder of the ocean no matter where you are. There are live narrated feedings every day.	https://www.montereybayaquarium.org/animals/live-cams
Create a Rube Goldberg Machine A Rube Goldberg machine is any complex contraption that uses a chain reaction to perform a simple task. Think of it as dominoes with far more steps leading to doing something simple	https://boyslife.org/hobbies-projects/projects/159359/how-to-make-a-rube-goldberg-machine/

Activity	Link
like turning a light on or silence an alarm. They involve a lot of set up but are incredibly satisfying to have work. We would absolutely love to see if you create a Rube Goldberg machine – film it and send it in to school. This site has examples of famous Rube Goldberg videos from YouTube.	