

KS3 Science experiments to do at home with adult supervision:

Before doing these experiments, remember to get permission from your parent or carer and pay attention to any health and safety information in the method/instructions.

Year	Topic	Experiment	Resource
Year 7 Activate 1	Working Scientifically	Investigating Teabags	https://www.science-sparks.com/get-the-kids-to-make-your-cuppa-investigating-teabags/
	B1.1 Cells	Animal Cell Model	https://www.science-sparks.com/animal-cell-model/
		Diffusion – Skittles Experiment	https://www.science-sparks.com/skittles-experiment/
		Osmosis	https://www.science-sparks.com/osmosis-made-easy/
		Growing Microorganisms	https://www.science-sparks.com/dirty-potatoes/
	C1.1 Particles	Air Pressure Experiments	https://www.science-sparks.com/air-pressure-experiments-for-kids/
		States of Matter Experiments	https://lifestyle.howstuffworks.com/crafts/science-projects/science-projects-for-kids-states-of-matter.htm
		Oobleck - Cornflour and Water – Is it a Solid or a Liquid?	https://www.livescience.com/21536-oobleck-recipe.html
		Making Ice cream in a bag	https://sciencebob.com/easy-to-make-

			ice-cream-in-a-plastic-bag/
		Fizz Inflator – Gas Pressure	https://sciencebob.com/build-a-fizz-inflator/
	P1.1 Forces	Stretching - Elasticity	https://www.science-sparks.com/making-a-catapult-looking-at-elasticity/
		Cotton reel Car	https://www.science-sparks.com/cotton-reel-car/
		Egg Drop Challenge – Inertia	https://sciencebob.com/try-the-egg-drop-challenge/
		Soap powered Model Boat	https://sciencebob.com/build-a-soap-powered-model-boat/
	B1.2 Body Systems	How do Lungs work? Model	https://www.science-sparks.com/breathing-making-a-fake-lung/
		Bend a Bone with Vinegar	https://sciencebob.com/bend-a-bone-with-vinegar/
		Digestive System Model	https://www.science-sparks.com/digestive-system-model/
	C1.2 Elements, Atoms, Compounds	Model of an Atom	https://science.howstuffworks.com/innovation/scientific-experiments/how-to-make-model-of-atom.htm
		LEGO Atoms, Elements, Mixtures and Compounds	https://www.stem.org.uk/resources/community/resource/

			5593/lego-atoms-elements-mixtures-and-compounds
	P1.2 Sound	Chicken Sounds from a Cup	https://sciencebob.com/chicken-sounds-from-a-cup/
		Make a Simple Duck Call	https://sciencebob.com/make-a-simple-duck-call/
		Sound Vibrations	https://coolscienceexperimentshq.com/how-to-see-sound/#:~:text=In%20this%20experiment%2C%20when%20you,pan%2C%20creating%20a%20sound%20wave.
	B1.3 Reproduction	Dissect a Flower	https://www.science-sparks.com/dissecting-flowers-and-more-plant-experiments/
		Germination Experiment	https://littlebinsforlittlehands.com/seed-jar-science-experiment-kids/
	C1.3 Reactions	Clean pennies with Vinegar	https://sciencebob.com/clean-pennies-with-vinegar/
		How to speed up chemical reactions	https://www.science-sparks.com/how-to-speed-up-a-chemical-reaction/
		Exploding Lunch bag	https://sciencebob.com/the-exploding-lunch-bag/
		Fantastic Foamy Fountain – Exothermic Reaction	https://sciencebob.com/fantastic-foamy-fountain/
		Create Bubbles & Heat	https://sciencebob.com/create-bubbles-

			heat-with-simple-chemistry/
		Colour Changing	https://sciencebob.com/rapid-color-changing-chemistry/
	P1.3 Light	Light Refraction Experiment	https://www.science-sparks.com/light-refraction-experiment/
		Optical Illusions	https://sciencebob.com/see-some-optical-illusions/
		Colour mixing & Transpiration	https://sciencebob.com/simple-color-mixing-and-plants-transpiration-activity/
		Jelly Lenses	https://www.sciencefun.org/kidszone/experiments/jello-lenses/
	C1.4 Acids & Alkali	Red pH Cabbage Indicator	https://www.science-sparks.com/make-a-red-cabbage-indicator/
		pH Indicator Test Strips	https://www.science-sparks.com/how-to-make-ph-indicator-test-strips/
		Lemon – Acid base Experiment	https://sciencebob.com/lemon-chemistry-an-acid-base-experiment/
	P1.4 Space	Oreo Cookie Moon Phases	https://sciencebob.com/oreo-cookie-moon-phases/
		NASA Space Place Experiments	https://spaceplace.nasa.gov/menu/do/
		Solar System Model	https://www.enchantedlearning.com/crafts/astronomy/solarsystemmodel/

Year	Topic	Experiment	Resource
Year 8 Activate 2	B2.1 Health and Lifestyle	How Exercise affects Heart Rate	https://www.science-sparks.com/exercise-affect-heart-rate/
		Colour Symphony - Lipase in dish soap breaking down fat in milk	https://sciencebob.com/a-color-symphony/
		Plastic milk	https://sciencebob.com/make-plastic-milk/
	C2.1 Periodic Table	Explore Virtual Periodic Table	https://periodictable.com/
		Colour in Activity – Periodic Table	https://www.cusd80.com/cms/lib/AZ01001175/Centrality/Domain/8020/Periodic%20Table%20Coloring%20Activity.pdf
	P2.1 Electricity & Magnetism	Play dough Circuits	https://www.science-sparks.com/easy-play-dough-circuits/
		Static Electricity Jumping Ghosts	https://www.science-sparks.com/static-electricity-experiment/
		Bending water - Static Electricity	https://sciencebob.com/bend-water-with-static-electricity/
		Roll a Can – Static Electricity	https://sciencebob.com/roll-a-can-with-static-electricity/
		Making an Electromagnet	https://sciencebob.com/make-an-electromagnet/
	B2.2 Ecosystem Processes	Respiration – Blowing Balloons – Fermentation	https://www.science-sparks.com/blowing-balloons-respiration-style/
		Photosynthesis Experiment	https://study.com/academy/popular/photosynthesis-experiments-for-kids.html
		Transpiration – Colourful Flowers	https://sciencebob.com/color-flowers-using-science/

		Blossoming Beans	https://www.sciencefun.org/kidszone/experiments/blossoming-beans/
		Grow an Avocado Tree	https://www.goodhousekeeping.com/home/gardening/a26064095/how-to-grow-avocado-tree/
	C2.2 Separation Techniques	Eggshell Geode Crystals – Saturated Solution	https://sciencebob.com/eggshell-geode-crystals/
		Rock Candy – Saturated Solution	https://sciencebob.com/make-your-own-rock-candy/
		Density Experiment you can Drink	https://sciencebob.com/a-density-experiment-you-can-drink/
		Chromatography Art	https://buggyandbuddy.com/chromatography-art-project/
	P2.2 Energy	Cotton reel Car	https://www.science-sparks.com/cotton-reel-car/
		Conduction	https://coolscienceexperimentshq.com/conducting-heat/
		Elasticity - Catapult	https://www.science-sparks.com/making-a-catapult-looking-at-elasticity/
	B2.3 Adaptation & Inheritance	Do Birds care what colour their food is?	https://sciencebob.com/do-birds-care-what-color-their-food-is/
		DNA Sweet Model	https://www.science-sparks.com/candy-dna-model/
	C2.3 Metals & Acids	Why is the statue of liberty green? Copper reaction	https://www.science-sparks.com/why-is-the-statue-of-liberty-green-copper-chemistry/
		How to speed up chemical reactions	https://www.science-sparks.com/how-to-speed-up-a-chemical-reaction/

		Making Slime - Polymers	https://sciencebob.com/make-some-starch-slime-today/
	C2.4 The Earth	Build a Volcano	https://sciencebob.com/make-your-own-volcano/
		Lava lamp – blobs in a bottle	https://sciencebob.com/blobs-in-a-bottle-2/
		Lava in a Cup	https://sciencebob.com/try-some-lava-in-a-cup/
	P2.3 Motion & Pressure	Air Pressure Experiments	https://www.science-sparks.com/air-pressure-experiments-for-kids/
		Magic Ketchup Experiment – Floating, Pressure, Density, Buoyancy	https://sciencebob.com/the-magic-ketchup-experiment/
		Balloon Rocket	https://sciencebob.com/make-a-balloon-rocket/
		Hoop Glider - Motion	https://sciencebob.com/the-incredible-hoop-glider/
		Soap powered Model Boat	https://sciencebob.com/build-a-soap-powered-model-boat/