

Home Learning Activities

Teacher: KJE / CCH

Subject: Science

Year Group or Key Stage: KS3

2026-2027

Topic	Home Learning Activities	Online Learning Links	SMSC
Forces	What forces do The different kinds of forces Measuring forces Using force arrows Balanced and unbalanced forces Friction Reducing friction: practical Reducing friction: analysis Energy Transferring energy	https://www.thenational.academy/teachers/programmes/science-secondary-ks3/units/forces/lessons	
Solid, liquid, gas states and changes of state	Solid and liquid states Melting: particle model Bunsen burners Melting: melting points and freezing points Particle model of substances in the gas state Boiling and condensing Changes of state: energy and evaporation	https://www.thenational.academy/teachers/programmes/science-secondary-ks3/units/solid-liquid-gas-states-and-changes-of-state/lessons	
Cells	The common processes of all living organisms Observing cells with a light microscope Preparing and observing a microscope slide Animal cell structures and their functions Plant cell structures and their functions Multicellular and unicellular organisms Specialised cells adapted for their functions	https://www.thenational.academy/teachers/programmes/science-secondary-ks3/units/cells/lessons	
Our solar system and beyond	The spinning Earth Our solar system Gravity Stars, galaxies and the universe Heating by the Sun	https://www.thenational.academy/teachers/programmes/science-secondary-ks3/units/solar-system-and-beyond/lessons	

	The Earth's tilt Seasons on Earth Changing ideas about Earth		
Solutions	Pure substances Mixtures: choosing equipment Mixtures: equipment diagrams Mixtures and solutions Diffusion Dissolving Variables Dissolving: scientific methods Solubility: practical Solubility: analysis Saturated solutions	https://www.thenational.academy/teachers/programmes/science-secondary-ks3/units/solutions/lessons	
Ecosystems	Food chains Predator-prey relationships Adaptations of predators and prey Food webs Ecosystems and habitats Pollination and human food security Using chemicals in farming Bioaccumulation The importance of biodiversity	https://www.thenational.academy/teachers/programmes/science-secondary-ks3/units/ecosystems/lessons	
Sound, light and vision	Sound vibrations Travelling vibrations Travelling sounds Reflecting and absorbing sound Shadows Reflecting light from mirrors How we see things Reflections in mirrors	https://www.thenational.academy/teachers/programmes/science-secondary-ks3/units/sound-light-and-vision/lessons	
Heredity and DNA	Heredity Heredity and genetic material Genetic material and DNA A model of the structure of DNA DNA from fruit The discovery of the structure of DNA DNA, chromosomes, genes and the genome	https://www.thenational.academy/teachers/programmes/science-secondary-ks3/units/heredity-and-dna/lessons	
Separation techniques	Separating an insoluble solid from a liquid Separating a soluble solid from a liquid Separating pure salt from dirty rock salt Separating liquids	https://www.thenational.academy/teachers/programmes/science-secondary-ks3/units/separation-techniques/lessons	

	Simple distillation Distillation: practical Chromatography		
Human skeleton and muscles	The human skeleton Muscles Movement Biomechanics	https://www.thenational.academy/teachers/programmes/science-secondary-ks3/units/human-skeleton-and-muscles/lessons	
Heating and cooling	Measuring temperature Changing temperature Mixing substances of different temperatures Cooling Thermal conductors Thermal insulators Energy and temperature Energy and substance	https://www.thenational.academy/teachers/programmes/science-secondary-ks3/units/heating-and-cooling/lessons	
Diffusion	Diffusion: moving particles Diffusion through a permeable material: practical Diffusion through the cell membrane Diffusion through a selectively permeable membrane: practical	https://www.thenational.academy/teachers/programmes/science-secondary-ks3/units/diffusion/lessons	
Climate change and living sustainability	The greenhouse effect Global warming Climate change and human activities Sustainable uses of resources Eating sustainability Heating and cooling our school sustainability Waste and recycling	https://www.thenational.academy/teachers/programmes/science-secondary-ks3/units/climate-change-and-living-sustainably/lessons	

*If you have any difficulties with any of the tasks, please e-mail k.jensen@greenwood.hants.sch.uk for support