EYFS – choose a range of suitable activities from the British Science Week Activity Pack.

Primary

Please use these activities throughout the week.

Activity	Notes
YEAST GROWTH AND TEMPERATURE	Relevant scientist (could be explored through research) – Louis Pasteur, Marjory Stephenson (microbiologist), Ruth Ella Moore (bacteriologist)
<i>p.</i> 20 of Primary Activity Pack from British Science Week	KS1 Working Scientifically LO: To observe closely and use observations to suggest answers to questions. Run activity as whole class demonstration. Encourage chn to identify the differences between each bottle. Closely observe over the course of the lesson
Chemistry	
Resources • Yeast • Sugar • Plastic bottles with lids • Water • Balloons • Weighing scales • Thermometer	LKS2 Working Scientifically LO: To make systematic and careful observations and use these to answer questions. Explore the method together and identify variables – why is this important? Closely observe what happens. Chn can produce scientific diagrams to show. Give key questions to answer e.g. At which temperature did the yeast grow best? How did you know?
• Tape measure	Working Scientifically LO: To plan different types of scientific enquiries to answer questions. Do not give the children the method initially. Tell chn the available equipment and that we want to find out at which temperature yeast grows best – how can we do this? Allow time for chn to consider a plan. Encourage consideration of variables and fair testing. After investigation, chn to develop an evaluative conclusion of their findings.
MARBLE MAZE	Relevant scientist (could be explored through research) – Isaac Newton, Galileo
Physics Activity based on: https://therapyfunzone.net/blog/cardboard- marble-maze/	KS1 Working Scientifically LO: To ask simple questions and recognise they can be answered in different ways. Chn to explore using the given materials to set up a simple maze to get the marble from one side of the box lid to the other using direction and control of the box. Chn encouraged to ask questions about their activity throughout e.g. what makes the marble move?
Resources • Cardboard • Straws • Scissors • Blue tac (hot glue in UKS2?) • Marbles	LKS2 Working Scientifically LO: To ask relevant questions and use different types of scientific enquiry to answer them. As KS1 but with additional challenge e.g. to have some dead ends or time allowance or additional materials that could be used to speed up/slow down the marble travelling. Chn encouraged to ask relevant questions throughout e.g. UKS2 Working Scientifically LO: To plan different types of scientific enquiries to answer questions. Y5 – using knowledge from previous forces lesson to make a marble maze. Y6 – activity from staff training ('zorbing')

BRIDGE BLUNDER <i>p. 10</i> of Primary Activity Pack from British Science Week Physics	Relevant scientist (could be explored through research) – Leonardo Da Vinci ('self supporting bridge'), Isambard Kingdom Brunel (engineer), Zaha Hadid (architect) KS1 Working Scientifically LO: To perform simple tests. Chn to explore materials and find different suitable materials to make a bridge across a small gap between two chairs. Test which bridge is the strongest by adding cubes (or similar) weight. Which material worked the best?
 Resources Paper and range of other materials Weights (or equipment to act as weights e.g. coins, blocks, cubes etc) Chairs / tables Sellotape 	LKS2 Working Scientifically LO: To set up simple practical enquiries including comparative tests. As KS1 but then to choose only one material to make the bridge from and then use a systematic method to test the bridge e.g. find the maximum weight the bridge can hold. Add one block at a time etc. Evaluate changes that could be made to design that could make it stronger and retest. UKS2 Working Scientifically LO: To use test results to make predictions to set up further comparative and fair tests. As LKS2, but with fair testing e.g. does it matter where you put the weight?
CLIPPY ISLAND Activity based on 'Talking, Thinking, Doing Science' folder	Relevant scientist (could be explored through research) – Charles Darwin KS1 Working Scientifically LO: To identify, classify and group. LKS2 Working Scientifically LO: To gather, record, classify and present data.
Biology <u>Resources</u> • Paper • Bird image • Varied beans • Varied sizes of bulldog clips • Stopwatches	UKS2 Working Scientifically LO: To report and present findings from enquiries including relevant data, conclusions, casual relationships and explanation of results.