Primary science enquiry outdoors

Learning outdoors is a key part of primary science.
The Teacher Assessment in Primary Science (TAPS) project has examples of a wide range of activities to support Working Scientifically.
Many of these can take place outside and examples are listed below. The majority of plans can be adapted for any age group or situation.

	Possible skills focus	**Examples of science learning which can be *done outdoors***	**Examples of science learning *about the outdoors***
Age 3-7	- Ask questions - Perform simple tests - Observe closely - Gather and record data to answer questions - Identify and classify	How can we make it move? Balls down ramps EY How can we sort the things we have found? Scavenger sort EY How could we make the best shelter? Incy spider shelter EY What happens to the ice? Frozen balloons EY Which materials can we see light through? Transparency Y1 Which objects do we think will float/sink? Float & sink Y1 Which shape of bridge is strongest? Bridge testers Y1 Which material made the best boat? Boat materials Y2 Is this alive? Has this ever been alive? Living & non-living Y2 How do we get the character out of the ice? Ice escape Y2 What materials can we find? Materials hunt Y2 Which material is the most waterproof? Waterproof Y2	How can we grow strawberries? Planting a strawberry basket EY What's different outside today? Forest school EY What can you see, hear, smell, feel? Senses walk EY Do all leaves look the same? Leaf look Y1 What parts does this plant have? Plant structure Y1 What colours/shades can we find? Shades of colour Y1 What season is it now? Seasonal change Y1 How can we help our local animals? Animal home build Y1/2 What does a plant need to keep healthy? Plant growth Y2 What living things can we find nearby? Nature spotters Y2 How many daisies are in each area? Daisy footprints Y2 Where do woodlice prefer to live? Woodlice habitats Y2
Age 7-11	- Plan different types of enquiry to answer Qs - Take measurements - Gather, record and classify data - Report findings - Use results to draw simple conclusions - Evaluate degree of trust in results	Which kind of materials make shadows? Making shadows Y3 Which rock is the most hard-wearing? Rocks report Y3 How can we package the egg? Egg drop packaging Y3 Which area is hottest/coldest? Adapt Measuring temp Y4 How do we find out the best conditions for drying? Drying Y4 What happens when you wash clothes? Micro-fibres Y4 How far can the object travel? Zipline testing Y5 How can we clean this water? Dirty water filter Y5/6 Which variables affect the flight? O-wing Y6	How much water do plants need? Measuring plants Y3 How can we help our local environment? Eco action Y3 What kind of litter is in our area? Litter pick questions Y3/4 What living things can we find? Local survey Y4 How do plants disperse their seeds? Seed dispersal survey Y5 Where is most polluted? Pollution survey Y5/6 Which moths would survive? Camouflaged moths Y6 Making a classification key for our area, e.g. Outdoor keys Y6 Where do more flowers grow? Flower sampling Y6

The full set of plans and examples can be found on the TAPS webpage, including many others which could take place outdoors: https://pstt.org.uk/unique-resources/taps/

Other recommended resources for outdoor learning in science:
- Woodland Trust spotter sheets and activities
- CCEA growing plants website guide for each month of the year
- Dr Katherine Forsey's detailed plans for pond/bush/minibeast/rock pool hunts