












Outdoor Maths Challenges for KS2 children

How many challenges can you complete? Tick them off as you go.

<p>Make a target in the garden using old towels or sheets layered on top of each other. Give each section a score (using two or three-digit numbers). What is the highest number you can score? Can you challenge your family?</p>	<p>Design a treasure hunt for a family member to do. Write instructions using positional language (e.g. – walk forwards 6 paces, turn 90° anti-clockwise...). Can they follow the instructions to reach the 'treasure'?</p> 	<p>Fill bottles with water and make your own bowling game. Give each pin a two or three-digit number and add them together to see who can get the highest score.</p>	<p>Go on an angle hunt outside. Make a list, do a sketch or take a photo of all the acute and obtuse angles you can see. Estimate the size of the angles. What is the largest/smallest angle you can find?</p> 	<p>Build a den with objects you find outside. Try different designs. Which is the most stable? What shapes have you created? How could you make your den waterproof?</p>
<p>Find an outdoor object (e.g. – a plant, garden chair etc.) that is exactly the same height as you. Now look for objects which are about double or half your height.</p>	<p>Set up your own obstacle course using things in your home or garden. How fast can you move around the course? Make an estimate and then test it out. What was the difference between your guess and the answer? Can you improve your time?</p>	<p>Use sticks or a skipping rope. What 2D shapes can you make on the ground? Draw or photograph each shape you make. Which of your shapes have lines of symmetry?</p> 	<p>Carry out a bird survey in your garden or from your window. List or draw the different birds you see and use a tally mark to record each time you see one.</p>  <p>Which is the most common bird? Which is the least common? What other surveys could you carry out?</p>	<p>Draw a map of your garden or local park. Start by drawing the outline and then draw symbols to show features like play equipment, sheds and trees. Record your symbols in a key.</p>

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<p>Design an outdoor game involving maths skills (e.g. – counting, times tables, measuring etc.). Try out your game with a family member and send it to a friend.</p>	<p>Use your ‘maths eyes’ when you are outside or looking through the window. What maths can you see? What mathematical questions could you ask? Find some obvious questions and some you think no-one else would think of.</p>	<p>Make a symmetrical pattern using outdoor objects like pebbles and leaves. Use a stick to form your mirror line:</p> 	<p>Look for outdoor patterns (e.g. – on leaves, buildings, on insects). Can you describe or draw the patterns carefully? What shapes can you see? Do any of the patterns repeat?</p> 	<p>Make a tower of pebbles. How many pebbles can you balance before it collapses? Which are the best pebbles to use?</p>  <p>Now try making some more interesting pebble ‘sculptures’ like this inuksuk from Canada</p> 
<p>Make up an outdoor exercise programme including timings for each activity (e.g. – 1 minute of star jumps). Try out your routine and send it to a friend to try.</p>	<p>How many times can you throw and catch a ball without dropping it? Make an estimate and then test it out. What was the difference between your guess and the answer?</p> 	<p>Make a sundial with a paper plate marked like a clock and a pencil or stick:</p>  <p>On a sunny day, turn your sundial until the time is correct. Check it throughout the day.</p>	<p>Make a small goal in the garden. How many times can you score in one minute? Can you beat your score? Set yourself some other physical challenges.</p> 	<p>Go on a bug hunt. Record your findings with a tally chart. Where do you find the most bugs? Why do you think this is? Can you draw a bar chart to show your findings?</p> 