

Notts Outdoors

Education Service

KS2 Rocket Science

<p>Overview of activity</p>	<p>Notts Outdoors offer a fantastic rocket science activity for all your class to have a hands-on practical science experiment on your playground! Working in twos or threes, your children will be asked “How much water and air will make your rocket fly the furthest?” Your pupils will be asked to make a predictions, record results and present their findings on a class graph We will need your playground and be warned rockets have been known to travel 60metres! National Curriculum science link for physics for Year 5 and 6 looking at forces and practical testing.</p>
<p>Key information</p>	<ul style="list-style-type: none"> • Suitable for (key stage): KS2 • Duration: 2 hours • Available in your own school grounds. This session takes place outdoors on your playground or field area. Adverse weather may affect the session and may result in a re-scheduled date.
<p>½ Day itinerary</p>	<ul style="list-style-type: none"> • Questions: What forces are acting on us now? Jump in air. Now describe forces. • 2 pieces of A4 paper. Predict what happens when let go. Now scrunch one piece up. Now predict what happens. Why? • Introduce rocket. What forces act on the rocket from take-off to landing? Demonstrate assembly, filling and firing. Groups of 2 or 3 (10 rocket sets) • Question: Does the amount of water affect how far it will fly? Write down predictions and answers. • Recording sheets (some may only investigate a couple of variables depending on time, as a class all variables will be tested) and explain about reliability of tests. How do we make this a fair experiment? What is altered each time? • Take equipment out onto playground. Explain safety procedures. • Investigate by firing rockets with different amounts of water, ensuring records are kept of amount of water and distance travelled. • Using the “Outdoor Classroom” calculate mean results and plot a class graph. Summarise results. Recap key question. What conclusions can we make about the amount of water.
<p>Key learning outcomes</p>	<ul style="list-style-type: none"> • Make predictions to key questions • Carry out fair testing • Take measurements • Record results • Draw conclusions
<p>Further information</p>	<p>As this is an outdoor immersive experience coats and suitable footwear may be needed. Please dress for the weather. All equipment will be cleaned and prepared in line with latest Covid-19 guidance. Please note all activity programmes may vary depending on number of pupils and their needs, length of visit and weather conditions.</p>

