

# Activity Instructions

Activity : Matchstick Rockets

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<b>Instructions</b>	<ul style="list-style-type: none"><li>- In the interests of safety, it is better to demonstrate this activity before allowing the Scouts to try it out. Practice beforehand to ensure you can successfully and safely launch a matchstick rocket</li><li>- Take a match and a 5cm square of aluminium foil</li><li>- Wrap the foil tightly around the head of the match, as shown on the attached sheet</li><li>- Make a hole in the enclosed match head with a safety pin</li><li>- Hold the matchstick rocket over a 'launch pad' (either use the suggested way on the attached sheet or a tea light)</li><li>- The sulphur of the match head burns but the gases have nowhere to go and so build up. This causes the foil to fly off when it reaches combustion temperature</li><li>- Experiment with different tail / match combinations to see who can launch their rocket the furthest distance</li></ul>
<b>Equipment</b>	<p>Candles Matches First aid kit Aluminium foil Wooden board</p> <p>You may be able to purchase some of this equipment by visiting <a href="http://www.scouts.org.uk/waystohelp">www.scouts.org.uk/waystohelp</a>.</p>
<b>Location</b>	Both indoor and outdoor
<b>Group size</b>	Whole section
<b>Suggested duration</b>	From 20 minutes to 40 minutes
<b>Additional Information</b>	<ul style="list-style-type: none"><li>- The attached sheet from NASA contains more detailed instructions for the activity</li><li>- Take care to set up the activity so that no team is launching in the direction of another</li><li>- Take time to brief the Scouts on fire safety before starting to make the rockets</li><li>- Have some water and a fire extinguisher nearby as a precaution</li></ul>
<b>Programme Zones</b>	Creative Expression Scoutcraft and Adventure
<b>Methods</b>	Themes Technology and new skills Team-building activities Games Design and creativity Activities with others
<b>Resources</b>	Matchstick Rockets - instructions (POL - 1160 - 100306.pdf)