

## EUROPEAN CHAMPIONSHIPS 2018: LEARNING & TEACHING SUGGESTIONS

<b>Curriculum Area</b>	<b>Sciences</b>
<b>Curriculum Focus</b>	<p>Forces - Which forces do athletes need to think about? What effect does friction have on running? What is streamlining and how does it affect swimmers?</p> <p>What aspects of STEM are used in sport?</p>
<b>Why don't you....?</b>	<ul style="list-style-type: none"> <li>• Investigate factors which affect floating – look at the shape and density of materials used to create a boat. Consider how this could be applied to the design of boats used in rowing. Hold a model boat race!</li> <li>• Investigate friction in shoes – undertake practical investigations to determine which type of shoes are best for reducing friction, and why.</li> <li>• Research how swimmers reduce friction and become more streamlined in the pool.</li> <li>• Create a poster, or make a video, demonstrating the forces at work in one of the European Championship sporting events.</li> <li>• Use a timer and light gates (if possible) to time how long it takes pupils to complete a 100m sprint. Use numeracy skills to work out an average speed and analyse the data.</li> <li>• Investigate how the wheelchairs used in sport have been designed to withstand forces, enhance streamlining and reduce friction.</li> </ul>
<b>Web Links</b>	<ul style="list-style-type: none"> <li>• <a href="#">Physics and sport</a> – Institute of Physics</li> <li>• <a href="#">BBC Terrific Scientific - Forces</a></li> <li>• <a href="#">Engineering in sport – Royal Academy of Engineers</a></li> <li>• <a href="#">The effect of friction on swimmers</a></li> </ul> <p>NB: Education Scotland is not responsible for the content of external websites and citation of a website does not imply endorsement by Education Scotland nor reflect the views of Education Scotland.</p>
<b>Now tell us.....</b>	<p>Use the hashtag #EdScotEuroChamps to tell us about what you've been doing. Let us know:</p> <ul style="list-style-type: none"> <li>• Did you try any of these ideas out with pupils?</li> <li>• If so, what went well?</li> <li>• What other European Championship-linked activities did you engage in today?</li> </ul>