



Lesson plan B1.1 Fitness and health

<p>Time: 1 hour APP ref(s): AF1 level 7, AF2 level 6</p>	<p>Book links: Page 14 Specification links: B1a</p>	
<p>Lesson objectives:</p> <ul style="list-style-type: none"> • Recall that blood in arteries is under pressure and that this can be measured. • Describe the factors that affect blood pressure. • Explain the difference between fitness and health. • Explain the link between saturated fat, cholesterol, and heart disease. 	<p>Previous knowledge required: KS3:</p> <ul style="list-style-type: none"> • How diet affects health • Human circulatory system 	
<p>Key words: Disease, systolic pressure, diastolic pressure, thrombosis</p>	<p>Fundamental Scientific Processes:</p> <ul style="list-style-type: none"> • Suggest ways of limiting risks, and recognise the benefits of activities that have a known risk (L, S, H). • Choose the most appropriate format for presenting data, and process data using mathematical techniques such as statistical methods or calculating the gradients of graphs (L, S, H). • Determine the level of confidence for a conclusion based on the identification of a qualitative relationship between variables and describe how further predictions can lead to more evidence being obtained (L). 	
<p>Starting off (10 minutes)</p>		<p>Resources required</p>
<p>1 Show Presentation (IB1.1.1) <i>Lesson objectives</i>. A Presentation with the images from the Student book (IB1.1.2) is also available.</p> <p>2 Discuss the terms 'fitness' and 'health'. What do the students think these terms mean?</p> <p>3 Summarise their responses. Students answer questions A–B on page 14 of the Student book.</p>		<p>Presentations IB1.1.1, IB1.1.2</p> <p>Student book</p>

Main ideas (45 minutes)	
<p>4 Show Presentation (IB1.1.3) <i>Fitness and health</i>, which shows the causes and effects of high blood pressure.</p> <p>5 Discuss how arteries become blocked, and the resulting health problems such as heart disease.</p> <p>6 Students complete Student activity (AB1.1.1) <i>Fat intake and heart disease</i>, analysing data on the link between saturated fat intake and heart disease.</p> <p>7 Students complete Student activity (AB1.1.2) <i>Measuring blood pressure</i>, measuring each other's blood pressure three times and finding the mean. They tabulate the data and compare it to published norms. This activity requires access to digital blood pressure monitors.</p>	<p>Presentation IB1.1.3</p> <p>Student activity AB1.1.1</p> <p>Student activity AB1.1.2, Teacher and technician notes TB1.1</p>
Plenary (5 minutes)	
<p>8 Show Video (IB1.1.4) <i>Exercise and heart rate</i>.</p> <p>9 Students complete Interactives (IB1.1.5, IB1.1.6) <i>Fitness and health</i>, to recap content covered in the lesson.</p>	<p>Video IB1.1.4</p> <p>Interactives IB1.1.5, IB1.1.6</p>
Differentiation/Extension	
<ul style="list-style-type: none"> Extension: Visit a fitness centre/gym, or ask a personal trainer from a fitness centre or a member of the school PE staff to talk to students about individual fitness programmes, including how ICT is used in assessing and monitoring fitness. Extension: Students answer question 6 on page 15 of the Student book. 	<p>Student book</p>
Homework opportunities	
<ul style="list-style-type: none"> Students answer questions 1–5 on page 15 of the Student book. Homework task (HB1.1.1) <i>Fitness and health</i>, answering questions on blood pressure, is available. 	<p>Student book</p> <p>Homework task HB1.1.1</p>