



## Living 'Links' to the Scottish Curriculum

### Lesson : Measuring Behaviour

#### (2012) Revised Higher Biology - UNIT 3 - Sustainability & Interdependence

Content	Notes	Suggested Learning Activities
<p><b>2. Interrelationships and dependence</b></p> <p>iii) Primate behaviour</p>	<p>Long period of parental care in primates gives an opportunity to learn complex social behaviours.</p> <p>To reduce unnecessary conflict, social primates use ritualistic display and appeasement behaviours. Grooming, facial expression, body posture and sexual presentation important in different species.</p> <p>In some monkeys and apes, alliances form between individuals which are often used to increase social status within the group.</p> <p>Complexity of social structure related to ecological niche, resource distribution and taxonomic group.</p>	<p>Living Links power point</p> <p>Visit Edinburgh Zoo or the Highland Wildlife Park for the lesson on Primate behaviour.  <a href="http://www.edinburghzoo.org.uk/education/school/education/lessonprogramme/secondary/index.html">http://www.edinburghzoo.org.uk/education/school/education/lessonprogramme/secondary/index.html</a></p> <p>Download Edinburgh Zoo resources and conduct a self-guided visit.  <a href="http://www.edinburghzoo.org.uk/education/resources/secondary.html">http://www.edinburghzoo.org.uk/education/resources/secondary.html</a></p> <p>Case study on primate behaviour.  <a href="http://www.educationscotland.gov.uk/highersciences/biology/unitthree/interrelationships/primaterebehaviour.asp">http://www.educationscotland.gov.uk/highersciences/biology/unitthree/interrelationships/primaterebehaviour.asp</a></p>



**(2012) Revised Advanced Higher – Unit 2 – Organisms & Evolution**

Content	Notes	Suggested Learning Activities
e.) Measuring and recording animal behaviour	<p>An ethogram of the behaviours shown by a species in a wild/zoo context allows the construction of time budgets</p> <p>Measurements such as latency, frequency and duration. The importance of avoiding anthropomorphism</p>	Use an ethogram and time sampling to compare the behaviour of different individuals of a species.

**(2012) Revised Advanced Higher – Unit 3 – Investigative Biology**

Content	Notes	Suggested Learning Activities
<p><b>1. Scientific Principles and process</b></p> <p>a.) Scientific Method</p>	Science is the gathering and organisation of testable and reproducible knowledge. In the scientific cycle, hypothesis testing involves the gathering, recording and analysis of data, followed by the evaluation of results and conclusions. New hypotheses may then be formulated and tested.	Ppt and Hannah's paper
b.) Scientific literature and communication	<p>The importance of publication of methods, data, analysis and conclusions in scientific reports so that others are able to repeat an experiment. Common methods of sharing original scientific findings include seminars, conference talks and posters and publishing in academic journals. Most scientific publications use peer review. Specialists with expertise in the relevant field assess the scientific quality of a submitted manuscript and make recommendations regarding its suitability for publication. Some journals also publish review articles, which summarise current knowledge and recent findings in a particular field. Critical evaluation of science coverage in the wider media. Increasing the public understanding of science and the issue of misrepresentation of science in the media.</p>	<p>Reference paper used in ppt.</p> <p>Leonardi, R., Buchanan-Smith, H., Dufour, V., MacDonald, C. and Whiten, A. (2010). Living Together: Behaviour and Welfare in Single and Mixed Species Groups of Capuchin (<i>Cebus apella</i>) and Squirrel Monkeys (<i>Saimiri sciureus</i>). American Journal of Primatology 72:33-47.</p> <p>Idea - Have students choose a different paper and interpret and present it in the same format for the others in the class.</p>