# Primate Communication – Learning Pack

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**Resources needed to conduct activity** – A simple sound recorder that records sound in non-compressed files, the Living Links videos and sound files, a computer and the free downloadable software package PRAAT.

This pack explains how to record primate calls as part of a research project. It then explains how to produce graphs from the recordings, with supplied sample files of chimpanzee calls. Students can then match calls to their behavioural context and start to work out what these calls might mean. *This pack covers topics in many physics syllabuses as well as those of biology!*

*The following materials are supplied as beta versions for you to try them out. Please do send us feedback!*

**Primate communication expert Dr. Katie Slocombe explains how to do a primate communication study**

**Video** <http://www.living-links.org/resources/materials-for-teachers/primate-communication-lesson-pack/> **or** <https://vimeo.com/47863597>

There are sound files to download for the practical activity. Students are given a video clip showing a chimpanzee behaviour and a matching call given during that behaviour – these relate to the video interview with Dr. Katie Slocombe. Students should use PRAAT software to measure the pitch and duration of each call in the sound clips and produce a mean for each type of call. Using the knowledge of food preferences from the video, and their measurements of calls 1 and 2, students should be able to work out how chimpanzees value two new food items shown in the video clips (behaviour 3 and 4). Students should use their measurements of the calls taken in PRAAT rather than their own assessments of the audio files.

**Primate call recordings (right-click to save to disk)**
[call1](http://www.living-links.org/wp-content/uploads/2012/05/call1.wav) [call2](http://www.living-links.org/wp-content/uploads/2012/05/call2.wav) [call3](http://www.living-links.org/wp-content/uploads/2012/05/call3.wav) [call4](http://www.living-links.org/wp-content/uploads/2012/05/call4.wav)

**Primate behaviour videos (right-click to save to disk)**
[behaviour1](http://www.living-links.org/wp-content/uploads/2012/05/Behaviour1.mp4) [behaviour2](http://www.living-links.org/wp-content/uploads/2012/05/behaviour2.mp4)
[behaviour3](http://www.living-links.org/wp-content/uploads/2012/05/Behaviour3.mp4) [behaviour4](http://www.living-links.org/wp-content/uploads/2012/05/behaviour4.mp4)

**Download the free PRAAT software and tutorials here:** [**www.praat.org**](http://www.praat.org)

**Additional resources:**

**Video of an example of an experimental study on capuchin monkey calls:**
The practical activity above is a simple example of how to conduct an observational study on primate vocal communication. This video gives an example of an experimental study.

Video file <http://www.living-links.org/resources/materials-for-teachers/primate-communication-lesson-pack/> or <https://vimeo.com/9698725>

**Katie Slocombe’s research paper - Functionally Referential Communication in a Chimpanzee**

[http://ukpmc.ac.uk/abstract/MED/16213827/reload=0;jsessionid=2nQZ4qmjzuwzdQ3U0wAt.0](http://ukpmc.ac.uk/abstract/MED/16213827/reload%3D0;jsessionid=2nQZ4qmjzuwzdQ3U0wAt.0)

If you have any difficulty downloading the materials, please feel free to visit our website directly to obtain the files.

<http://www.living-links.org/resources/>