# Natural selection

Is fitness in the gene or in the animal?

# SAILS inquiry and assessment unit overview

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| **Name** | Natural selection |
| **Key content/concepts** | * Visualising evolution * Natural selection * Genetic drift * Fitness |
| **Level** | * Lower second level * Upper second level |
| **Inquiry skills assessed** | * Planning investigations * Forming coherent arguments * Working collaboratively |
| **Assessment of scientific reasoning and scientific literacy** | * Scientific reasoning (data entry and observation skills; organisation and interpretation of data) * Scientific literacy (using physical models to understand adaptation by natural selection; analysis of data and presentation of scientific results) |
| **Assessment methods** | * Classroom dialogue * Teacher observation * Worksheets * Student devised materials (report) * Other assessment items (pre/post test) |

Table 1: Rubric for the assessment of the skill of forming coherent arguments

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| **Inquiry skill** | **Level 1** | **Level 2** | **Level 3** |
| **Forming coherent arguments** | They do the measurements but are not consistent in how they do this for each measurement. | They do the measurements and they take care to do them in the same way throughout the activity. | They do the measurements in the same way throughout the activity and they discuss the validity of and uncertainty associated with the measurements. |