

## B9 Inheritance

### B9.4 Biodiversity

#### What factors affect organisms?

- 127** The number of organisms found in an area
- 128** The way organisms are spread across an area
- 129** Light intensity, temperature or water availability
- 130** For example, caterpillars eating plants and rabbits feeding on plants
- 131** A pitfall trap
- 132** By creating a vacuum using two tubes, one for aiming and the other for sucking air, to pull insects into a container
- 133** A quadrat
- 134** To identify different species based on physical characteristics
- 135** A spider
- 136** Because it is too difficult and time-consuming to count every single organism in a large area
- 137** Water availability, because the plant grows only near the river, where the soil is likely to be wetter
- 138** The number of insects in the pitfall traps would be likely to decrease, as the bird would reduce their population.
- 139** The abundance and distribution of the lettuces would decrease, as more rabbits feed on them, reducing their spread across the field.
- 140** Place the quadrat in several random areas throughout the field, count the number of the plant species and calculate the population size.
- 141** A pooter is better for insects on leaves because it allows precise collection without damaging plants. Insects that live on leaves are unlikely to be caught in a pitfall trap.
- 142** It is likely to be a worm.
- 143** One plant may outcompete the other plant for other resources, like minerals or space, even if light is sufficient.