

### Essential information

**Age range:**

7-11 (children either side of this range may enjoy this activity dependant on ability)

**Group size:**

Split into groups of 3 or 4

**Time needed:**

Approximately 20 minutes planning, 30 minutes building and 30 minutes for flying and recording

**Curriculum links:**

Science Unit 3C  
Characteristics of materials, Unit 6E Forces in action, and elements of D&T and Sustainability.

**Setting:**

Classroom and outside space if possible

**Contact us:**

For enquiries regarding the activity sheets , please contact Emily Jones on:  
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For enquiries regarding stag beetle biology and ecology, please contact Deborah Harvey on:  
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## Stag beetle flying competition- leader's notes

### Background to activity

In this activity children will learn about anatomy of an adult stag beetle and have to build a model in groups from recycled materials. The models will then be put to the test in a flying competition.

### Materials needed

- A variety of clean rubbish
- Scissors, glue and sticky tape
- Tape measure/metre rules

### Running the activity

Start by getting the children to learn the parts of an adult stag beetle body (see images in pack). Ask the children to think about and draw a plan of how they are going to build a model that will fly the furthest. Prior to the making activity ask the children to collect rubbish at home to bring in for their model. In small groups build the stag beetle, taking care with sharp materials, in an allotted time. Once finished move to an open area and lay out the measuring tape ready for the competition. Each group will have a practice run and recorded attempt. Children can record the results in a table. You may wish to have a prize for which groups beetle flies the furthest.

### Extension activities

- Higher ability children could write a summary of the planning stage as well as a labelled sketch.
- Repeat the competition so each group has multiple attempts and must work out a mean measurement.
- Ask the children to think about other factors as well as materials that may affect the result and how they could overcome these.
- Fully decorate and paint the models and display.