Lesson 1 Teeth and biting

AGES 5–7

Objective
- To compare dinosaur teeth by performing experiments using models.

Subject references
Science
- Making observations and measurements. (NC: KS1 Sc1 1)
- Recognise when a test is unfair. (NC: KS1 Sc1 2d)

Resources and preparation
- Make a copy of page 44, 'Dinosaur teeth', for each child.
- Each group will need a cup or small bowl, some plain flour, a spoon and a ruler.
- The children will also need Plasticine, a spent long matchstick and a ballpoint pen (to put marks on the matchstick).
- Have serrated and smooth plastic knives for demonstration (for the Extension).

What to do
- Point out to the children the two pictures of the dinosaur skulls on the photocopiable sheet. Invite them to look carefully at the teeth in each skull and decide which one would give the deepest bite and help a predator to wound and catch its prey. Encourage the children to explain their answers by referring to the shape, size, number and position of the teeth.
- Now tell the children that scientists sometimes make models when they want to test an idea. Show them a piece of Plasticine and explain that they are going to make their own models of a pointed tooth and a flat tooth, using the diagrams on the photocopiable sheet to help them.
- Spoon flour into the cup and smooth off its surface. Tell the children that this represents the side of a dinosaur's body.
- Remind the class how to make a fair test and let them drop each tooth from the same height (approximately ten centimetres is best) into the flour. The children may find that sometimes the tooth falls sideways, so remind them that experiments must be tried a few times to ensure fair and genuine results.
- When each tooth has made a hole, let the children judge by eye which one is the deepest. Ask them to think about how they could make a small measuring device to put in the hole.
- After they have made a few suggestions, produce the long matchstick. Show the class how to put regular markings on the stick and insert it carefully into the hole to compare depths. Were their eye-judgements correct? Was the result what they expected?

Extension
- Carefully show the children a plastic knife with a smooth edge and a plastic knife with a serrated edge. Explain that some dinosaurs had teeth with smooth sides and others had teeth with tiny 'saw teeth' on them. Ask the children to guess which would be better for cutting with.
- Give them a flat piece of Plasticine and show them how to carefully test how easy or difficult it is to cut through the Plasticine with each knife.

Did you know?
Amygdalodon had spoon-shaped teeth and Edmontosaurus had teeth shaped like diamonds.