Supporting skeletons

Learning objective
QCA Unit 4A 'Moving and growing'
- To learn that the skeleton supports the body.

Resources
'Supporting skeletons' Notebook file; a range of reference books containing information about different invertebrates.

Links to other subjects
English
Sentence structure and punctuation
- Encourage the children to think about how invertebrates move and to use powerful verbs, such as *slithered*. More confident learners will also be able to add adverbs to describe the movement.

Starter
Play the video clip on page 2 of the Notebook file. Ask: *What do you notice about how this animal moves? How quickly does it move? Does it move in a certain way? Do you think this animal has a backbone or not?*

Whole-class shared work
- Show the children page 3 and ask them what the animal is. (A jellyfish.) Reveal the correct answer using the Eraser from the Pen tray. What do the children notice about the jellyfish? Encourage them to point out the structural differences between this animal and a mammal.
- Ask the children to think about how their own skeletons support their bodies: they would not be able to stand if they had no leg bones! Go to page 4 to show how the skeleton acts as a framework for the human body.
- Go to page 5, and ask the children to work in pairs to discuss where they think each animal should go. Invite pairs to the board to drag pictures into the correct space, giving reasons for their choices.
- Explain that animals with a skeleton are called *vertebrates* because they have a backbone, which is the supporting column of the body. Ask the children: *What does having a backbone enable you to do? What does it not allow you to do?*
- Explain that the animals without an internal skeleton are called *invertebrates*.

Independent work
- Display page 6. Ask the children to work in pairs to create a fact file about an animal without an internal skeleton. They should choose one invertebrate and find out information about it, using the questions on the board as a guide: *How does it move without a skeleton? What shape is it? How does it protect itself?* Encourage the children to think of further questions.
- Provide them with a selection of reference books that give information about different invertebrates.
- Mixed-ability pairs should provide support for less confident learners. Monitor pairs to ensure that they both contribute to the task.
- Challenge more confident learners to think about how they want to present their information in a fact file.

Plenary
- Ask the children to share what they have discovered about their chosen invertebrates. Display page 6 and add interesting facts that the children have gathered about how these animals support or protect themselves.
- The children should understand that all bodies need some sort of support, but not all animals have an internal structure to do this. Point out that animals without an internal skeleton often have strong muscles to help them to move, whereas other animals, like spiders, have an *exoskeleton* (a skeleton on the outside of the body).
- Go to page 7 and summarise what the children have learned.

Whiteboard tools
Add text to the page with the On-screen Keyboard, accessed through the Pen tray or the SMART Board tools menu.

 Pen tray

 Select tool

 On-screen Keyboard