

## Art

# Make a 3D tortoise from card or clay

#### **Learning Intention**

We are using different materials to make patterned sculptures of animals.

#### **Introduction**

Our giant tortoises will probably live to be older than any other animal in our zoos – some at other zoos have lived 180 years! Tortoises are famous for their strong shell, which protects them from predators. The shell is built around their ribcage – you can still see their ribs inside their shell, if you look at an old shell. Their tummy is covered with a shell, too. Most tortoises can hide inside their shell when they are scared.

Can you make a model of a tortoise's shell?

#### **Easy Method**

A bread roll is just the right shape, so we would suggest using a stale, crusty roll to represent the shell.

#### **Decoration**

Paint your shell in the colour and patterns that can be seen on our tortoises. Start by giving the shell a coat of a light colour (yellow, beige), and then letting that dry. Then add the shape of the scutes with a sharpie or crayon in a brown or green.

The scutes (plates) can be different shapes, but many are hexagonal – each scute grows as the tortoise grows, so the shell gets bigger and bigger. They're made of a material like our fingernails.

Box turtles can completely close their shell, using a hinge in the bottom plate. This makes their shell even easier to model!

### **Clay Method**

An alternative would be to make the tortoise out of clay, either as a solid lump or as a clay shell around a suitably shaped object.

- 1. Take a hand towel and scrunch it up to make the shape of half a ball. Secure with a little sticky tape if necessary. This shape will provide support for the clay shell as it dries.
- 2. Roll out some clay into a flat sheet, as thick as a pencil.
  - 3. Cut the sheet in two, with one part bigger than the other.
    - **4.** Lay the smaller sheet of clay over the flat bottom of the paper towel shape.
    - 5. Lay the larger sheet over the top and crimp the edges (like a pasty) to join the two sheets together
    - 6. Use a pointed stick to mark the pattern of scutes on the shell.



