

# PEEK-A-BOO BONE

## Objective

Build a cross-section model of a bone showing the inside story of this living tissue.

## What to Do

### Assemble

- 1 toilet paper tube
- 1 piece white construction paper
- tape
- 1 sponge
- 1 red licorice whip



1. Cover the toilet paper tube with white construction paper.
2. Lay the licorice on the sponge.
3. With the licorice inside, fold the sponge in half lengthwise and push it into the paper tube. Trim any licorice that hangs over the edge of the toilet paper tube.

## Discuss

Discuss the model of a bone.

This model will help students understand what bones look like on the inside. The outer part of the bone, called the compact bone (represented by the paper and toilet paper tube), is the hardest part and it protects the bone. Blood vessels carry blood to and from the bone through tiny tubes in this layer. Inside the bone is something that looks like a sponge; in fact, it is called the spongy bone. Not only does the spongy bone strengthen bones, but the tiny holes throughout help make the bones lightweight. If bones were solid, they would be too heavy to drag around. Inside the spongy part of the bone is soft bone marrow. Bone marrow helps make the red blood cells that your body needs every day. The licorice in the model represents the bone marrow. Your bone marrow makes 200 billion blood cells a day. Now that's a busy bone!

## Going further

Ask a butcher to cut a soup bone in half. Show the cross-section to the class. Help students identify components of the actual bone that were introduced in the model.