

Component 1: Fossil Formation and Mary Anning

Component overview:

STEP ONE: Tell the story:

The story is the starting point. Subsequent teaching is built around it.

Here, you can find the **text of the story** and a **video** showing storyteller Carmel telling the story to the class. You'll notice she helped the learning come alive by performing this story outside.

Before you tell the story to your class, we suggest that you practice by reading the text through, watching the video, and then practicing the actions.

You'll also need to gather some resources:

- The Mary Anning Story
- Mary Anning: pinny/apron, bonnet hat (Victorian costume)
- Men of Science hat
- blue, purple, brown, yellow scarves
- Ichthyosaur fin, fossils (these can be drawn on card, or you can use our **How To guide** to make them)
- Collecting basket
- Y3 Rocks and Soils overview
- Fossils mini quiz

Teacher will perform the story, engaging with the children and encouraging the children to join with the repetitive elements.

STEP TWO: Work in the classroom:

*This document will take you through the component, step by step. The content is also available as an **Active Inspire Flipchart - component 1** which means it's interactive and can be used on a whiteboard.*

Active Inspire Flipchart software is free, you can download it [here](#).

1. Show vocabulary the children will have already heard in the story, and some which will be new this lesson.

Vocabulary

Here is some vocabulary that you will hear today.

Some words you will have already heard and some will be new.

Do you have any idea what they might mean?

sedimentary rock

fossils

minerals

skeleton

pressure

sediment



2. Children then retell the Mary Anning story in their own words. Teacher should perform it again first, if necessary. (We noticed this was useful when there had been a gap between first hearing the story and the follow up lesson.)

3. 'How Are Fossils Made?' - Play this [BBC BITESIZE video](#), and link it back to what we learnt from our Mary Anning story.



4. Using the (below) extract from the story, show the accompanying diagram and use the two to scientifically explain the process of the formation of sedimentary rock and fossils.

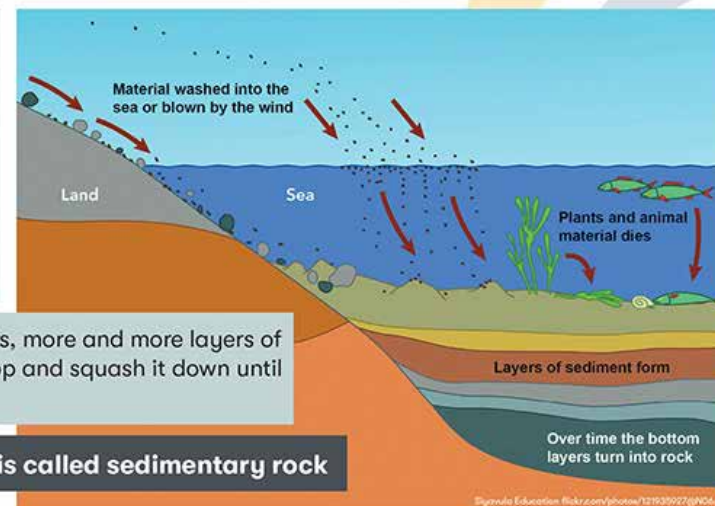
Over time, more sand (**sediment**) fell on the sea bed, and more and more.

And so it carried on for years, or ages, and on and on, and the layers of sand (**sediment**) got heavier and heavier and heavier. Everything got squashed down by the weight of the sand (**sediment**) on top of it. When sand gets squashed down, it turns into **sedimentary rock** and anything in the sand (**sediment**) also gets turned into **sedimentary rock**.



Sedimentary Rock

Another type of rock is made when tiny bits of rock and soil, as well as the bodies of dead creatures, settle at the bottom of the sea to form a layer of sediment.



Over millions of years, more and more layers of sediment settle on top and squash it down until it turns into rock.

This type of rock is called sedimentary rock



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STEP THREE: Children's response

Let's retell the Mary Anning story that Carmel read you and remind ourselves what happened.

When we perform it for the second time, we are going to add in some extra information and technical vocabulary about fossils.



1. Children retell the story, without the paper, in groups and use the props in order to do so. Use questioning to draw out missing information and encourage the use of technical vocabulary.
2. Reshow the vocabulary from the beginning of the lesson as we have recapped lots of knowledge. Can the children now discuss what any of the vocabulary means; or make any links between the words? *fossils, sedimentary rock, minerals, skeleton, sediment, pressure, decompose.*
3. Give out the fossils mini-quiz and get children to attempt the answers from what they have learnt from this lesson. The answers will be revisited in a further component.

Mini-Quiz Fossils

1. The preserved remains or trace of a dead animal or plant from long ago is called _____.
2. Fossils provide _____ for how living things and the environment have changed over time.
3. What part of an animal is made into a fossil?
4. The hard parts of the animal become buried by small particles of rock called sediment. This is why fossils are found in _____ rock.
5. Which of the following can NOT be turned into a fossil?



4. Where possible, revisit the retelling of the story at other times during the week.

STEP FOUR: Plenary questions for discussion

- Who is Mary Anning?
- What are fossils?
- How are fossils formed?
- What type of rock are fossils found in?

ADDITIONAL RESOURCES:

- Medium Term Planning document
- [Explore More Padlet](#) – here we have gathered lots of information and resources for you to expand your knowledge