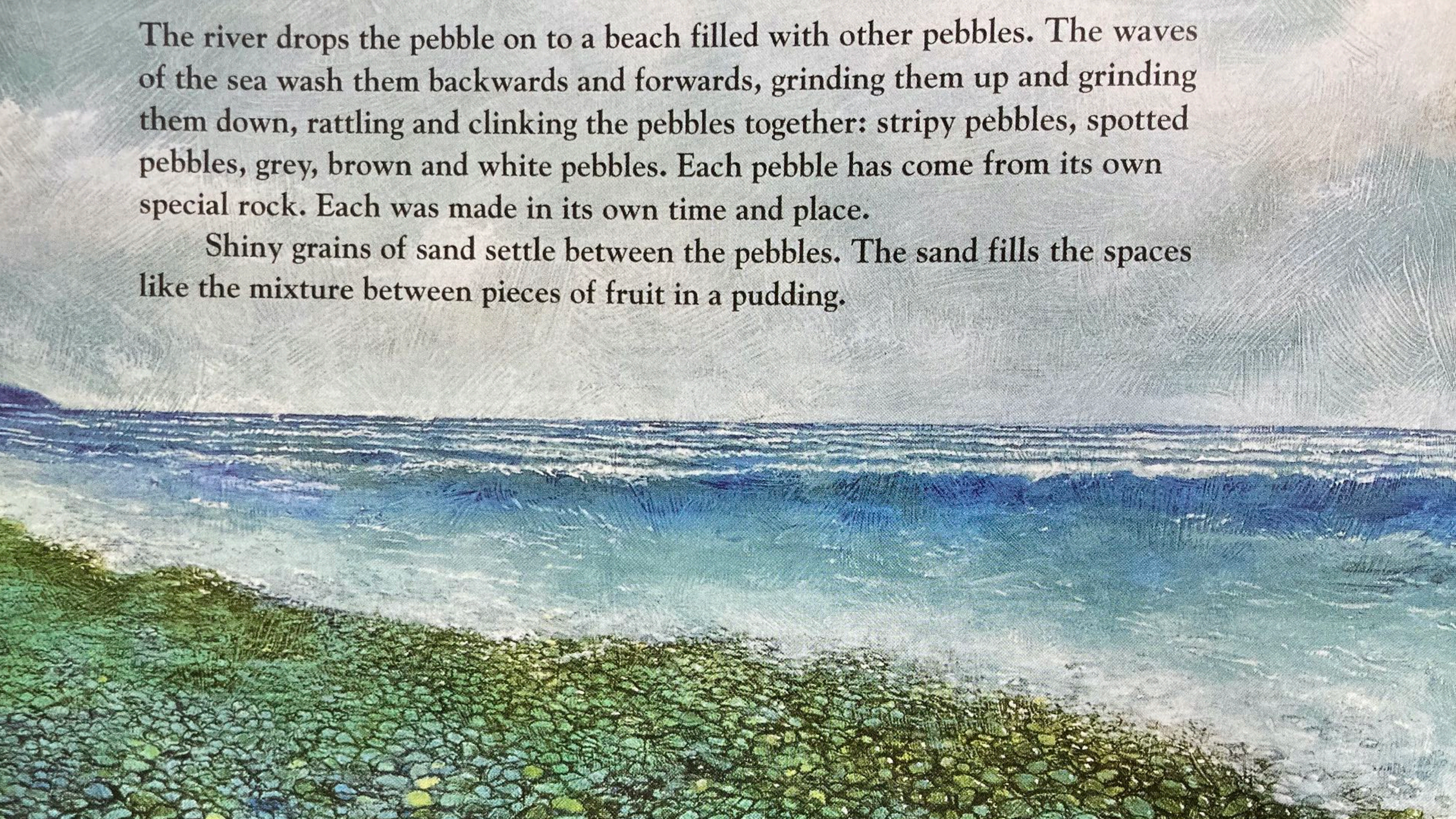


The Pebble in my Pocket

Let's have a closer look at these
pages in the text...

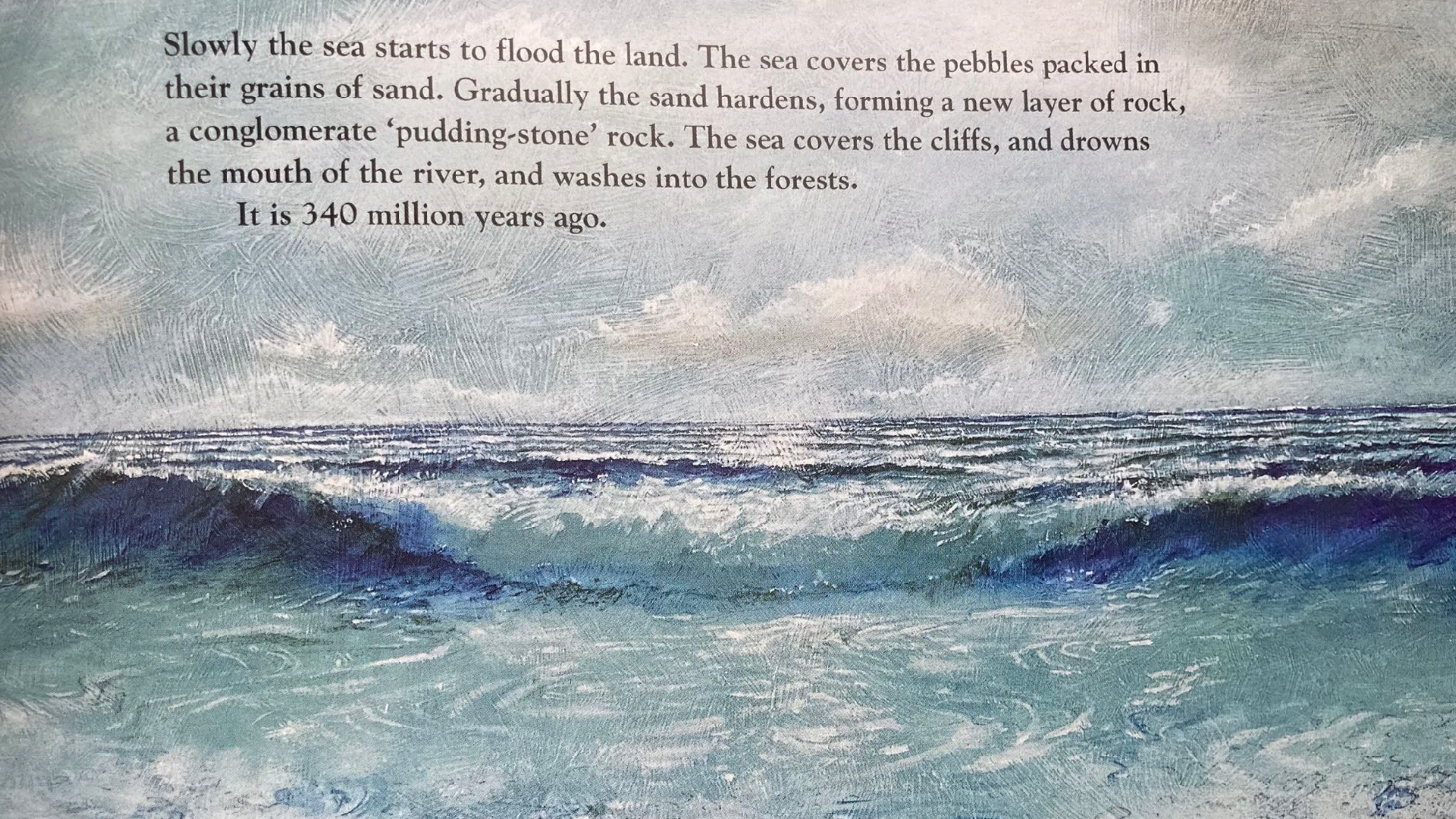
The river drops the pebble on to a beach filled with other pebbles. The waves of the sea wash them backwards and forwards, grinding them up and grinding them down, rattling and clinking the pebbles together: stripy pebbles, spotted pebbles, grey, brown and white pebbles. Each pebble has come from its own special rock. Each was made in its own time and place.

Shiny grains of sand settle between the pebbles. The sand fills the spaces like the mixture between pieces of fruit in a pudding.

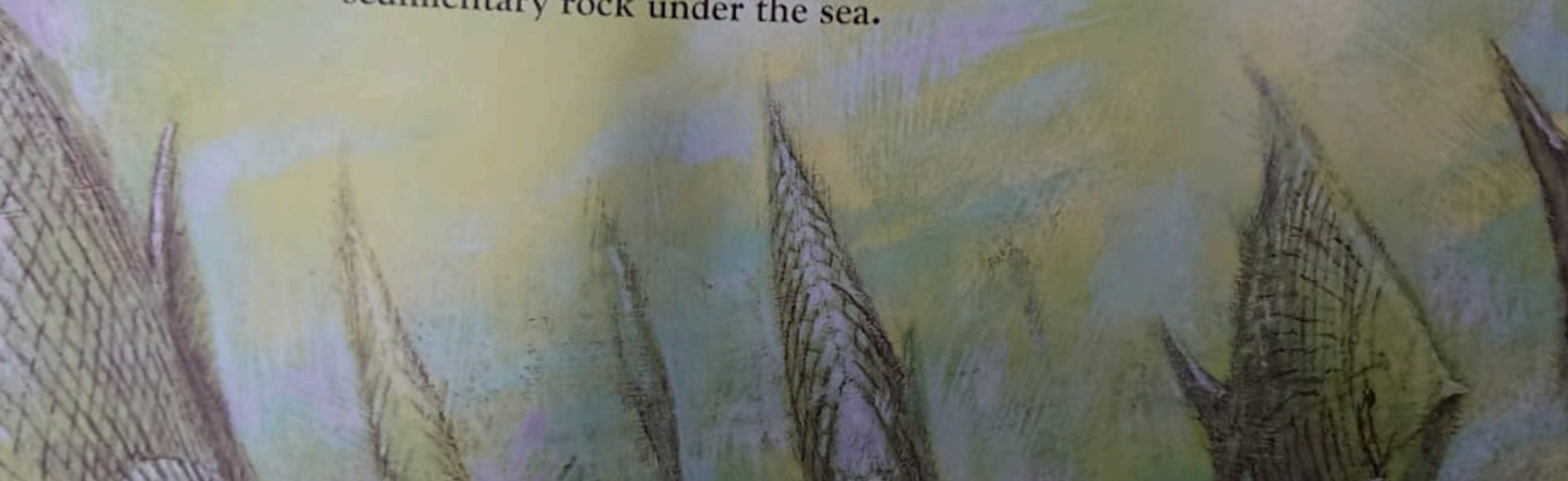


Slowly the sea starts to flood the land. The sea covers the pebbles packed in their grains of sand. Gradually the sand hardens, forming a new layer of rock, a conglomerate 'pudding-stone' rock. The sea covers the cliffs, and drowns the mouth of the river, and washes into the forests.

It is 340 million years ago.



Creatures swarm and slither in the warm sea.
The tiny bodies of dead sea creatures drift down
on to the seabed, layer upon layer. Fine mud
drifts down, and sand. As each layer presses down,
the layers beneath slowly harden and the particles
cement together to form more rock, layers of
sedimentary rock under the sea.



Your challenge is to learn all about sedimentary rocks and use the information to create a poster to explain to other children how they are created.

On the next few slides are lots of useful websites and information that you can use to help you to research...

Some useful websites:

<https://www.youtube.com/watch?v=DpKMuUKHYwQ>

<https://www.youtube.com/watch?v=U8Y3oaYR-3c>

[https://www.bbc.co.uk/bitesize/topics/z9bbkqt/articles/
zsgkdmn](https://www.bbc.co.uk/bitesize/topics/z9bbkqt/articles/zsgkdmn)

[https://kids.britannica.com/kids/article/sedimentary-rock/
476316](https://kids.britannica.com/kids/article/sedimentary-rock/476316)

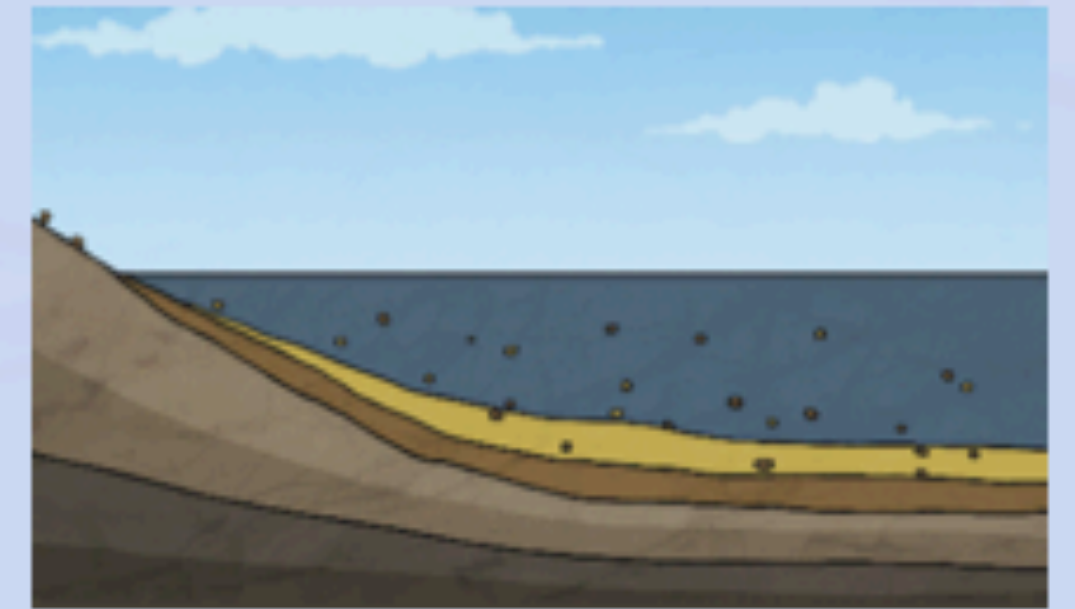
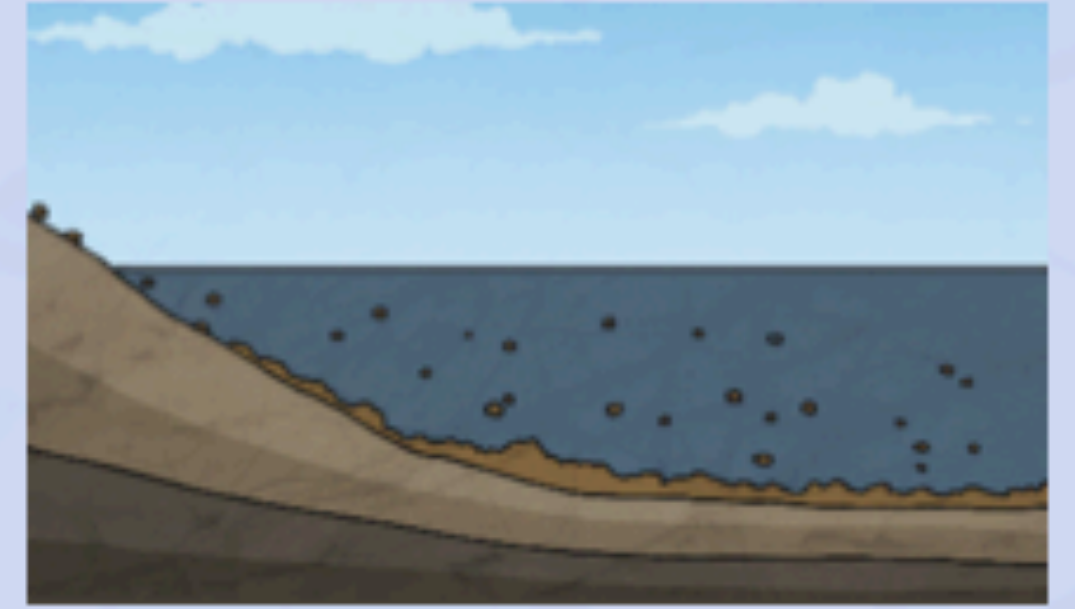
Sedimentary Rock

Sedimentary rock forms under the sea.
The following illustrates the process:

1) As a result of weathering and erosion, bits of rock end up in lakes and rivers. Rivers transport bits of rock and deposit them on the bottom of the sea. This process is called **sedimentation**.

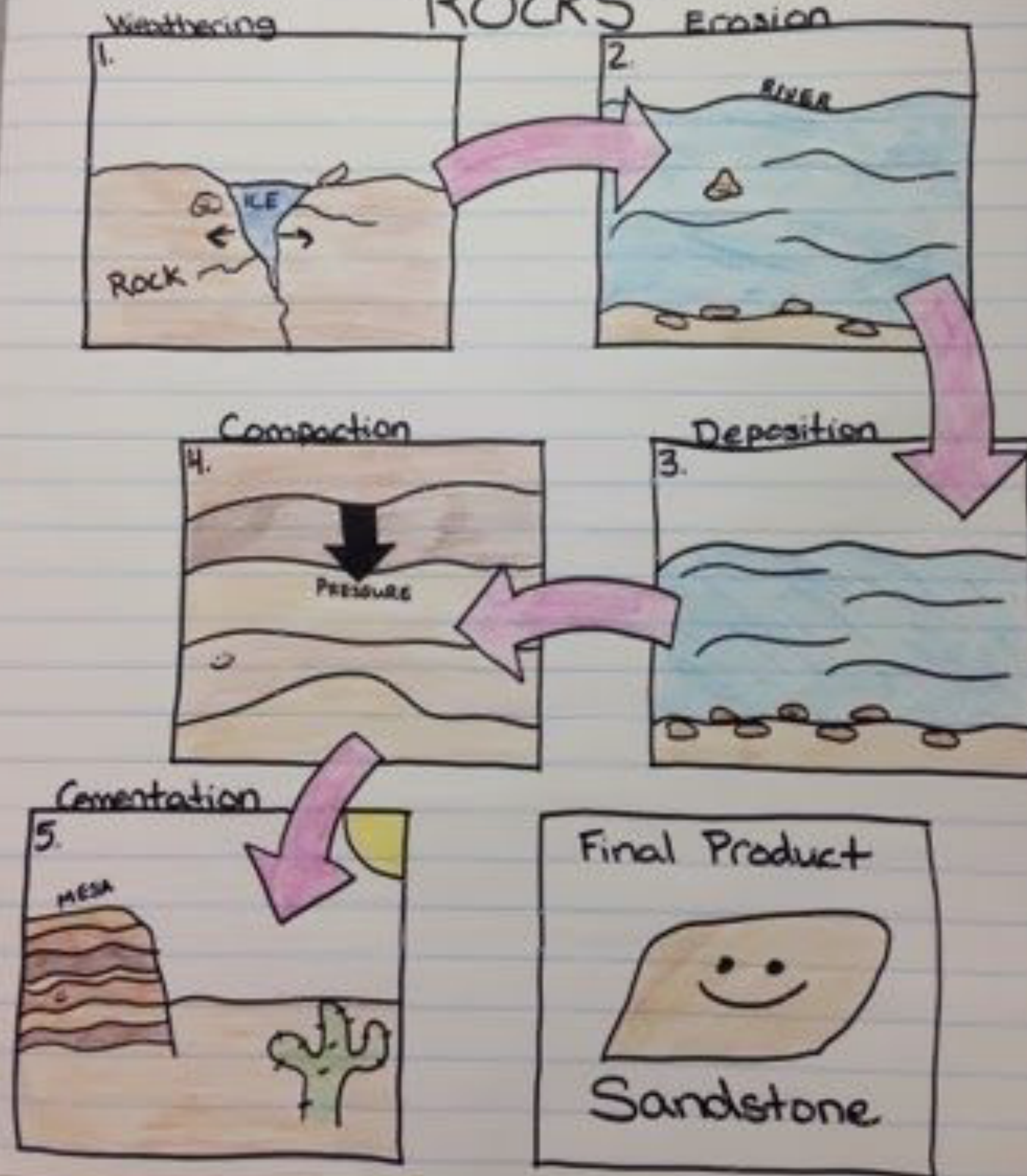
2) With time, more layers (strata) pile up and press down on the lower layers of rock. This process is called **compaction**.

3) Over time, water is pushed out from these layers and the process of **cementation** occurs. This is when salt compounds glue or cement the bits of rock together so they form a solid layer.



FORMATION OF...

Sedimentary ROCKS



Sedimentary Rock

Sedimentary rock is formed from broken pieces of rock called sediments. Over many years these sediments can find their way to the bottom of oceans and lakes and get pressed and cemented together into layers.



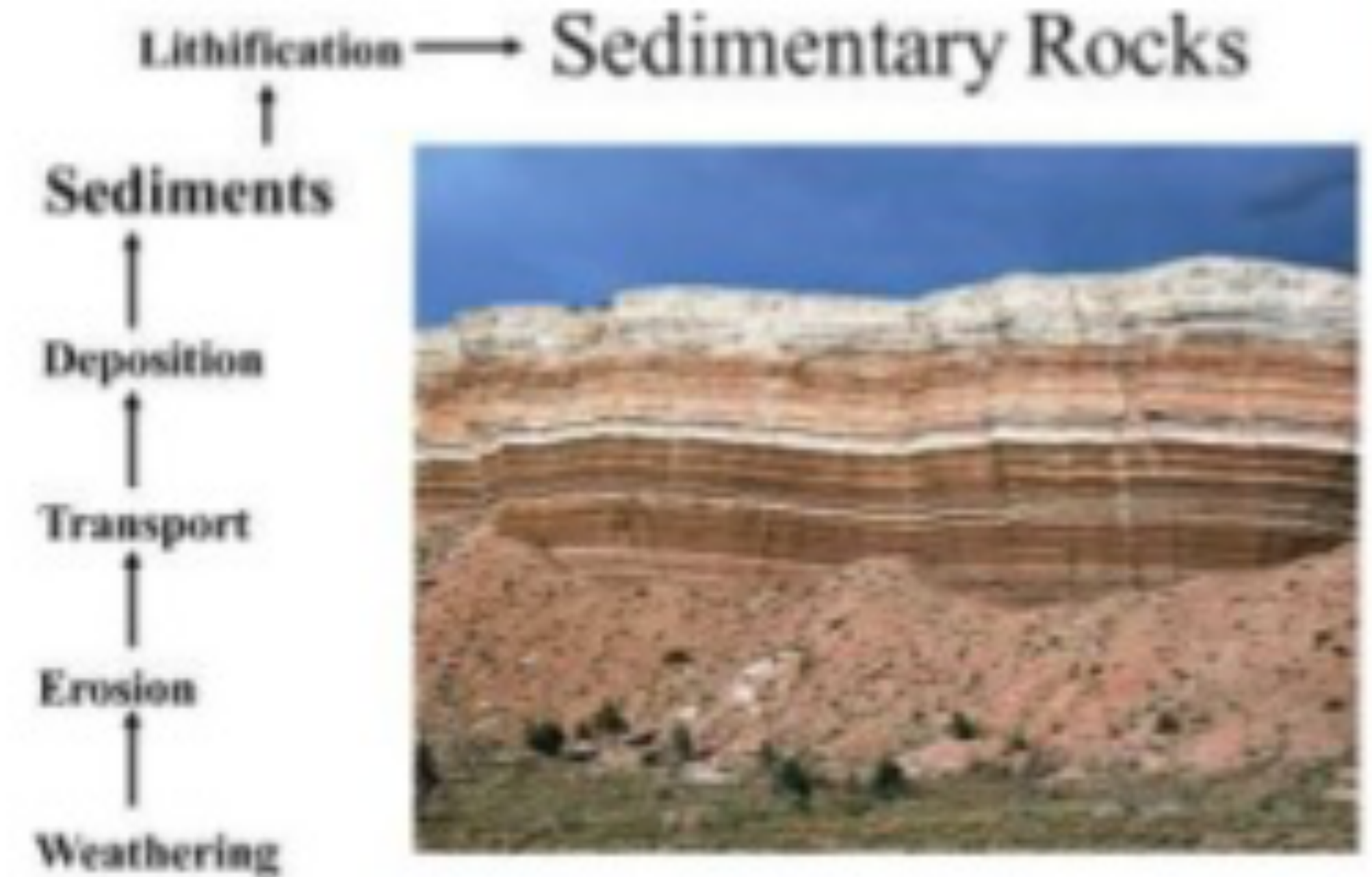
Examples:

- Sandstone
- Shale
- Limestone
- Epsom salt



Sedimentary Rocks

- FACTS
 - Fours steps to be formed
 - Erosion
 - Deposition
 - Compaction
 - Cementation
- Examples:
 - Limestone, sandstone, shale



Grammar Time – Prepositions Recap

A preposition is a word that tells you **where** something is in relation to something else or **when** it is happening.

For example: after, before, on, inside....

Click on the link below for more information and a fun game to play!

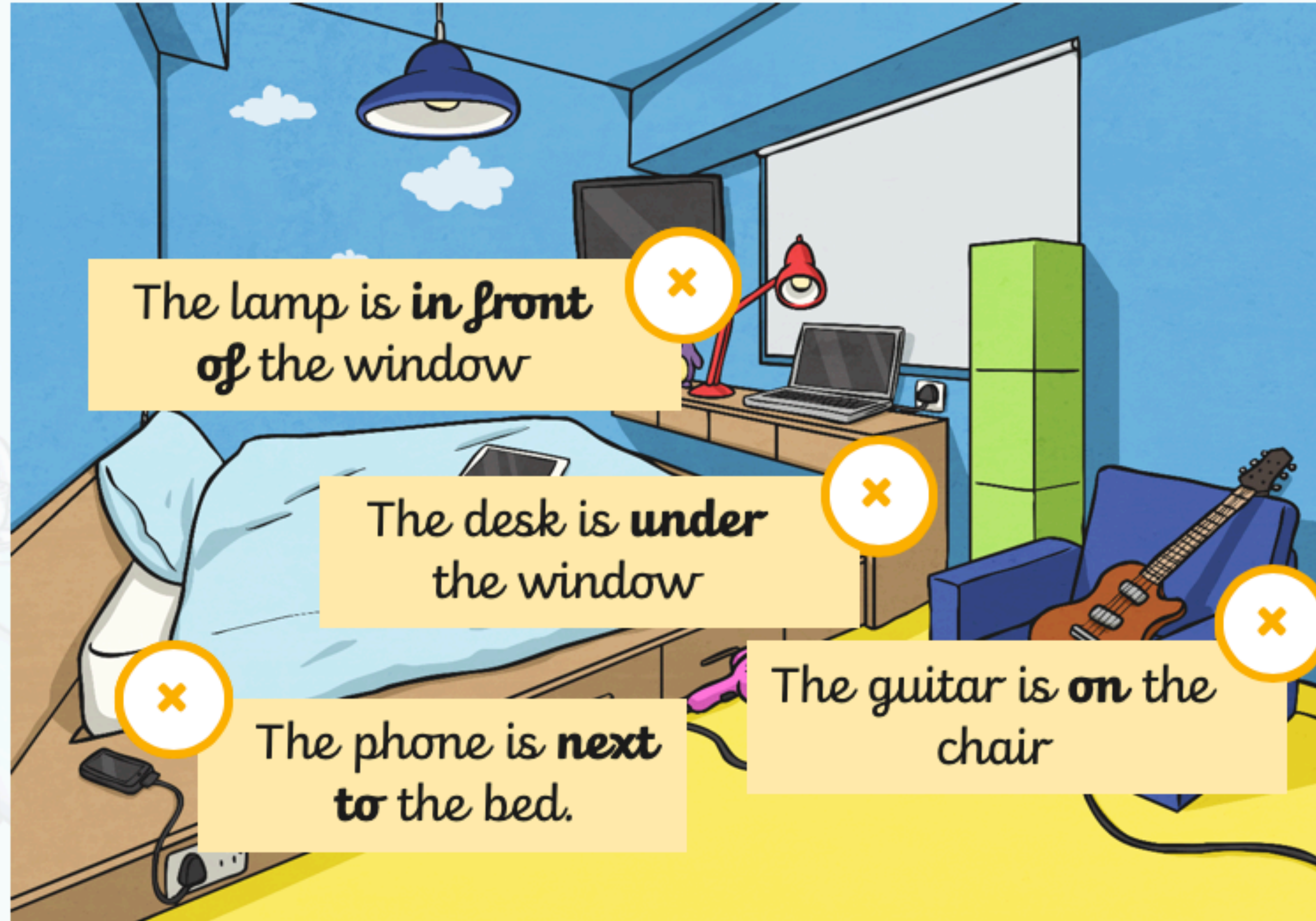
<https://www.bbc.co.uk/bitesize/topics/zwwp8mn/articles/zw38srd>

Where Is Everything?

Look at this bedroom scene. Can you describe
where everything is?



Where Is Everything?



How many different words or phrases (**prepositions**) can you think of to describe **time**, **place** or **movement**?



Preposition Or Not?

Keeping in mind that 'a **preposition** is a word or phrase used to describe a **place**, **time** or **movement**' sort the following words into the correct circles:

Prepositions

**Not
Prepositions**

angry

before lunch

after school

and

under

through

threw

beside

decide

in

Prepositions can express time, place or cause.
Circle the words below that are prepositions.

due to under or if but so
after in because of before
and during



Use the prepositions above to write your own sentences.
Underline the preposition in each of your sentences.

Read the next five pages of the book...

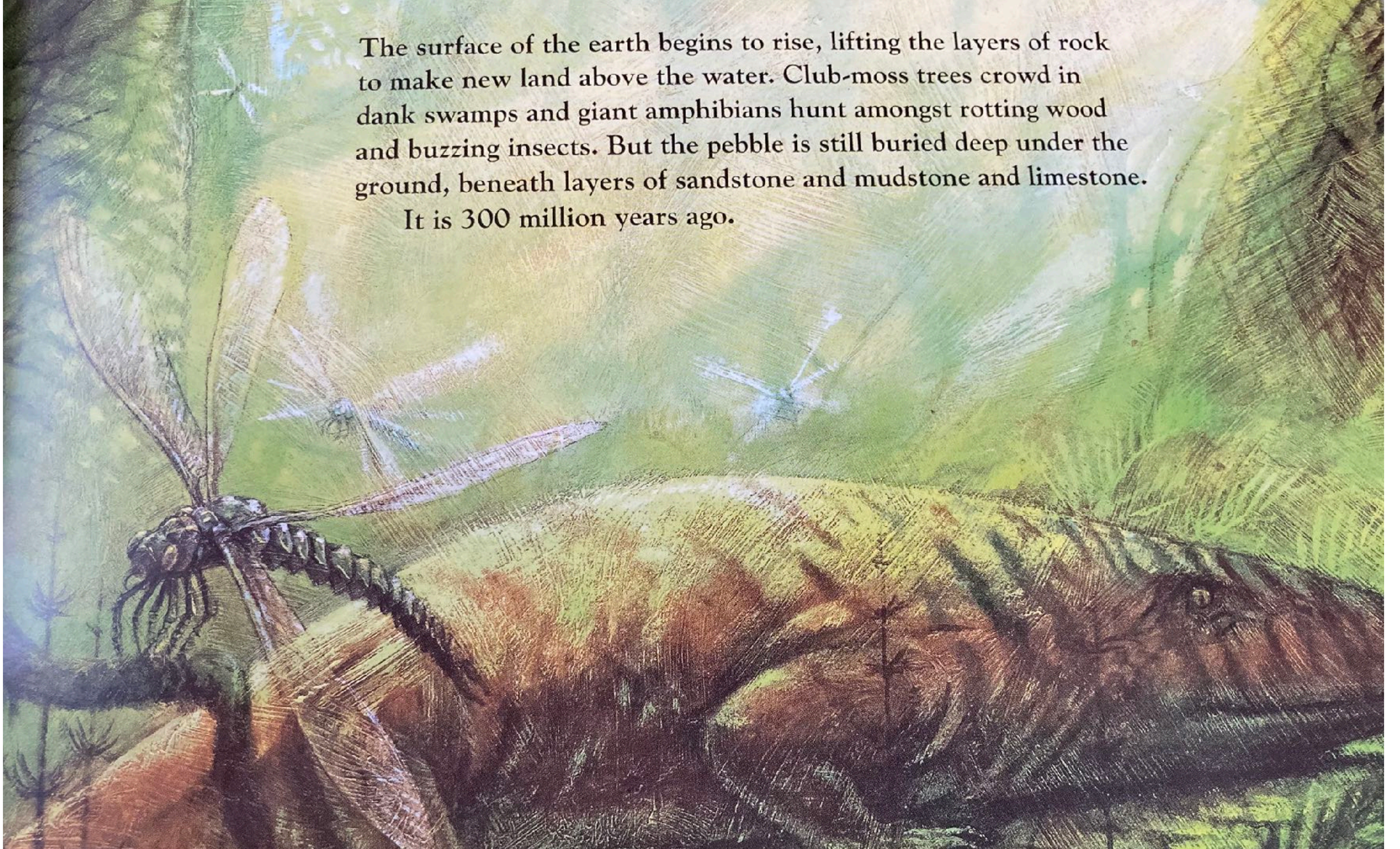
As you read on, answer the following questions:

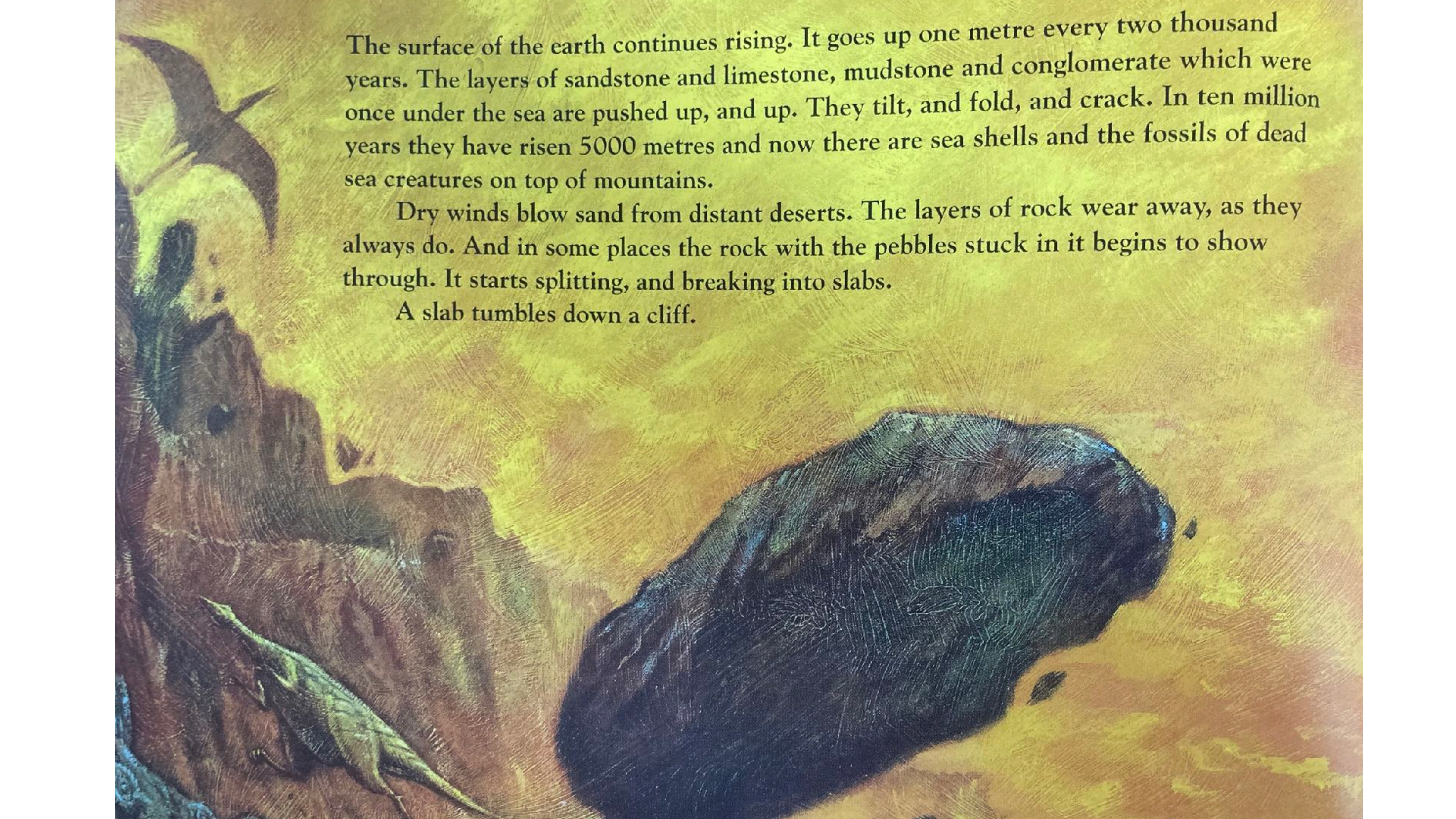
- **How is the Earth changing?**
- **Are there any words you don't understand?**
- **What questions do you have?**
- **What can you see in the illustrations?**

You could make notes independently, but make sure you discuss the text and your ideas with an adult too!

The surface of the earth begins to rise, lifting the layers of rock to make new land above the water. Club-moss trees crowd in dank swamps and giant amphibians hunt amongst rotting wood and buzzing insects. But the pebble is still buried deep under the ground, beneath layers of sandstone and mudstone and limestone.

It is 300 million years ago.



The background of the text is a painting. It depicts a rugged, rocky landscape. In the foreground, a large, dark, textured rock formation dominates the right side. To the left, a green lizard is perched on a rock. The sky is a mix of yellow and orange, suggesting a sunset or sunrise. The overall style is painterly and somewhat abstract.

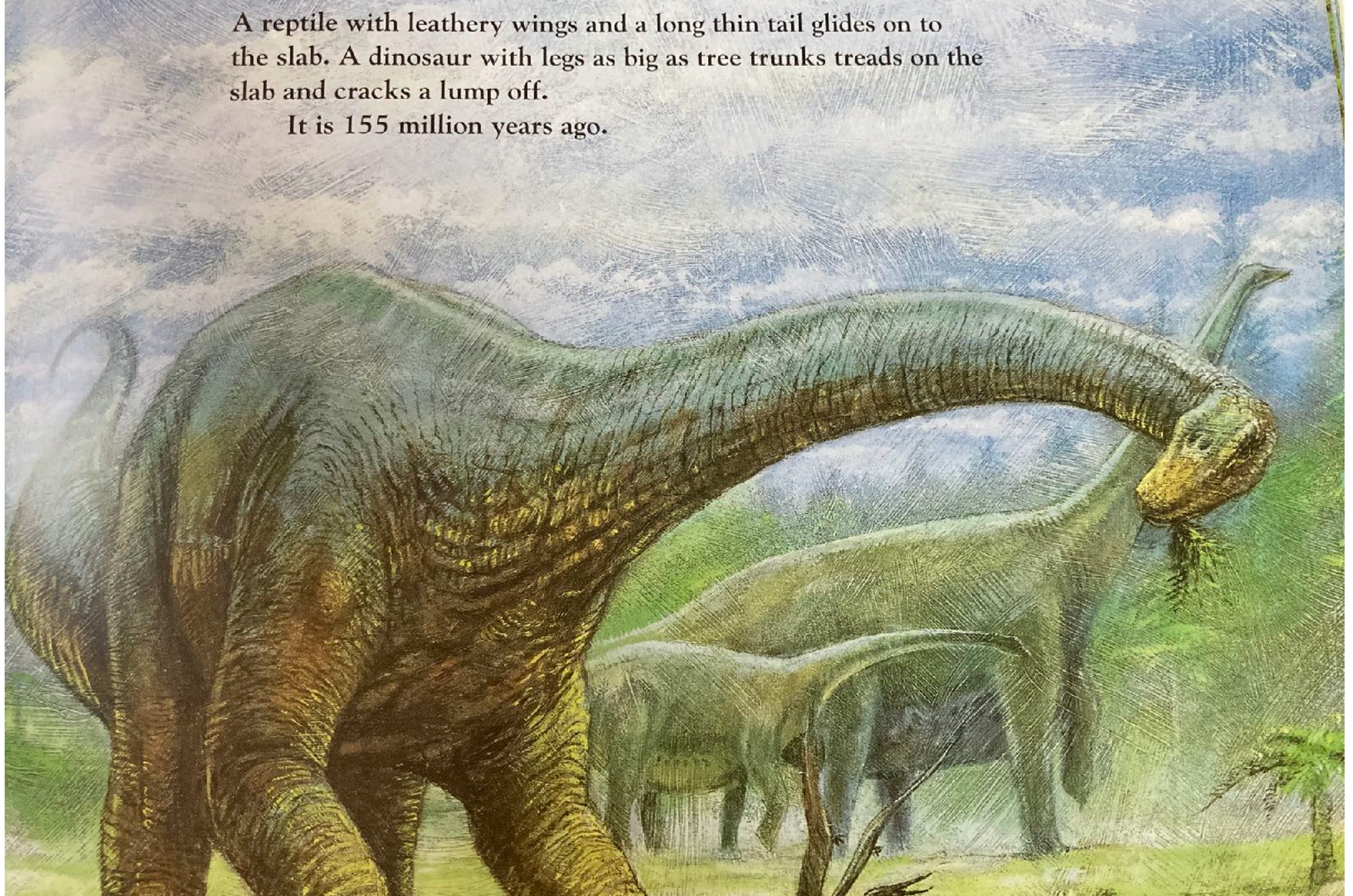
The surface of the earth continues rising. It goes up one metre every two thousand years. The layers of sandstone and limestone, mudstone and conglomerate which were once under the sea are pushed up, and up. They tilt, and fold, and crack. In ten million years they have risen 5000 metres and now there are sea shells and the fossils of dead sea creatures on top of mountains.

Dry winds blow sand from distant deserts. The layers of rock wear away, as they always do. And in some places the rock with the pebbles stuck in it begins to show through. It starts splitting, and breaking into slabs.

A slab tumbles down a cliff.

A reptile with leathery wings and a long thin tail glides on to the slab. A dinosaur with legs as big as tree trunks treads on the slab and cracks a lump off.

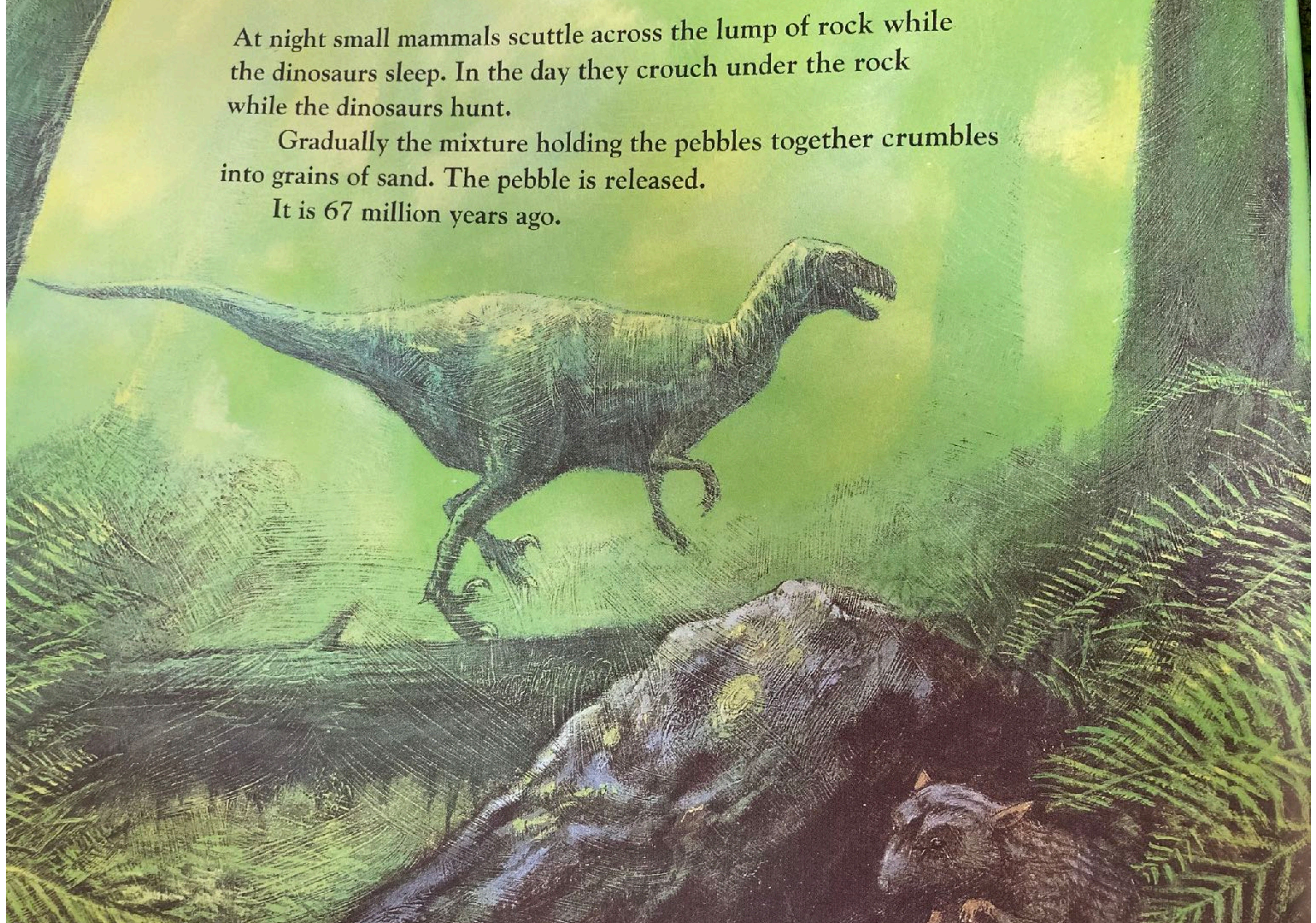
It is 155 million years ago.



At night small mammals scuttle across the lump of rock while the dinosaurs sleep. In the day they crouch under the rock while the dinosaurs hunt.

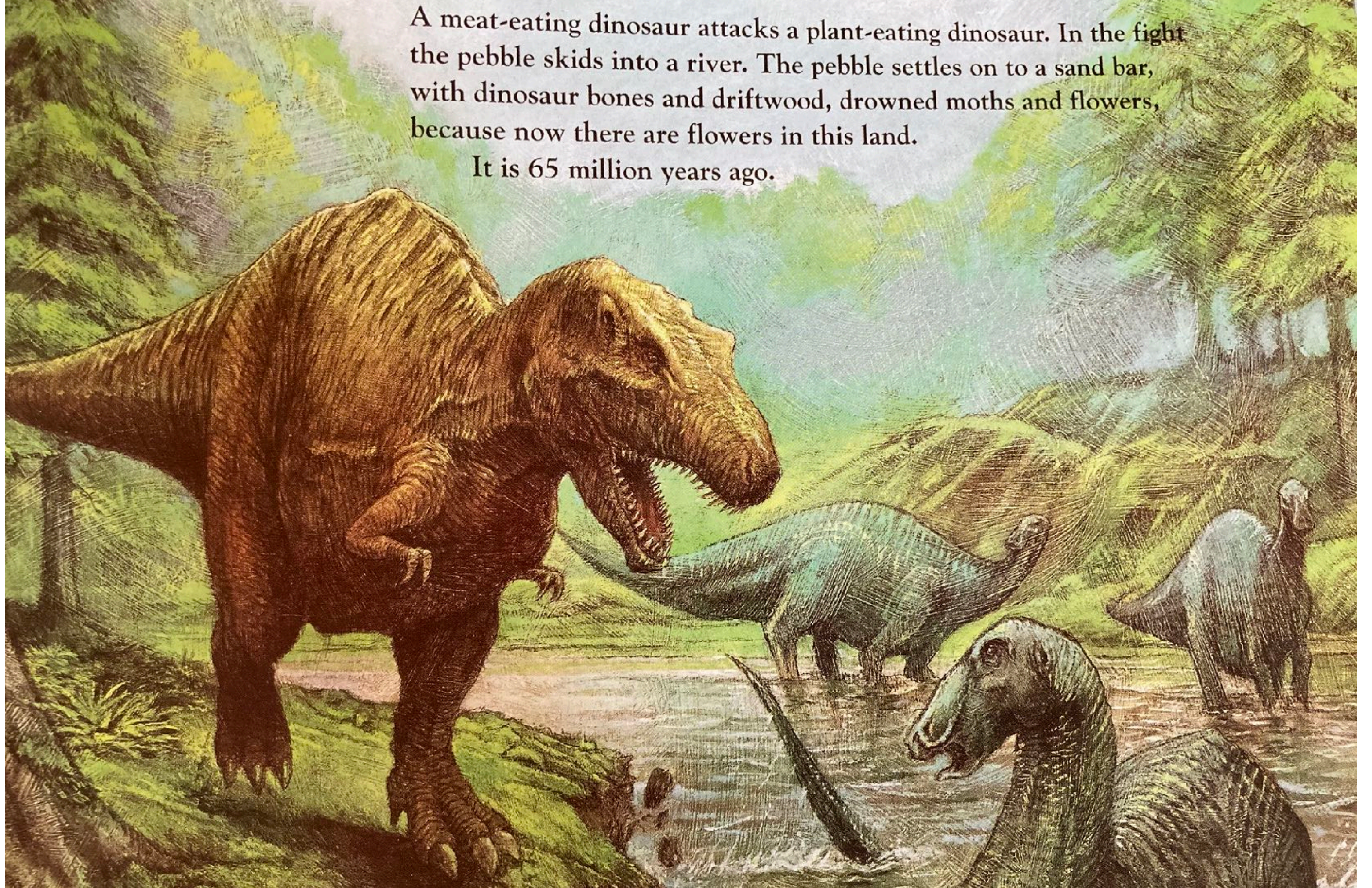
Gradually the mixture holding the pebbles together crumbles into grains of sand. The pebble is released.

It is 67 million years ago.



A meat-eating dinosaur attacks a plant-eating dinosaur. In the fight
the pebble skids into a river. The pebble settles on to a sand bar,
with dinosaur bones and driftwood, drowned moths and flowers,
because now there are flowers in this land.

It is 65 million years ago.



Now choose one of these illustrations to focus on...

Look closely at the image and answer these questions:

- What catches your eye?
- What are the main colours and why do you think these were chosen?
- What animals or plants are on the page?
- What does the position of the animals tell you about what is happening?
- What do you think might have just happened before?
- What do you think might happen next?

THEME: Use these illustrations to complete at least 2 of these activities (you can also choose to do more, or even think of your own):

Drama: Act out your chosen scene and film a video of what happens.

Art: Create your own dinosaur inspired artwork.

English: Write a poem using the 5 senses to describe the scene.

P.E: Create a dinosaur themed dance.

Music: Compose a piece of music that would suit what is happening in the picture e.g. stomping, buzzing, crashing noises

ICT: Use Stop Motion or Scratch to bring the scene to life.

Make a KWL grid like this and **complete the first 2 columns**
with your own ideas...

<u>Topic: Dinosaurs</u>		
<u>K</u> What I Know :	<u>W</u> What I Want to know:	<u>L</u> What I have Learnt :

History: Discover Dinosaurs!

Have fun discovering dinosaurs with your own project (this could be a presentation, a fact file, quiz, video or any way that you wish to show your learning). Be creative!

Here are just some ideas about what you could find out:

- When dinosaurs roamed the Earth
- What dinosaurs ate
- All about the different species and their names
- About their habitats
- Interesting facts
- Where in the world they were found
- What happened to the dinosaurs

Look on the next slide for lots of links to help you with your research.

History: Discover Dinosaurs!

Here are some links to information and videos to help you:

- KidsScience Facts
- CoolKidFacts – Dinosaurs
- LearningJunction Youtube – Learn about Dinosaurs
- Dr. Binocs Show Youtube – Dinosaurs
- Happy Learning Youtube – All you need to know about Dinosaurs

KWL Grid

Now you can complete the third column on your KWL grid
(what you have learnt).

<u>Topic: Dinosaurs</u>		
<u>K</u> What I Know:	<u>W</u> What I Want to know:	<u>L</u> What I have Learnt: