Coastal Landform Processes

29/03/2018

Do Now

Copy below:

When waves lose energy material is deposited. This typical happens in sheltered areas such as bays, this explains why beaches are found here. Wave refraction is where the energy of the wave is reduced.

Aim

- To understand process acting on the coast that lead to landforms


Wave energy converges on the headlands
Wave energy is diverged
Wave energy converges on the headlands
Sediment moves and is deposited


http://www.bbc.co.uk/education/clips/zsmb4wx
PREVIEW

Erosion

Destructive waves will erode the coastline in four different ways:

1. Hydraulic Power
2. Corrosion
3. Attrition
4. Corrosion
5. Abrasion

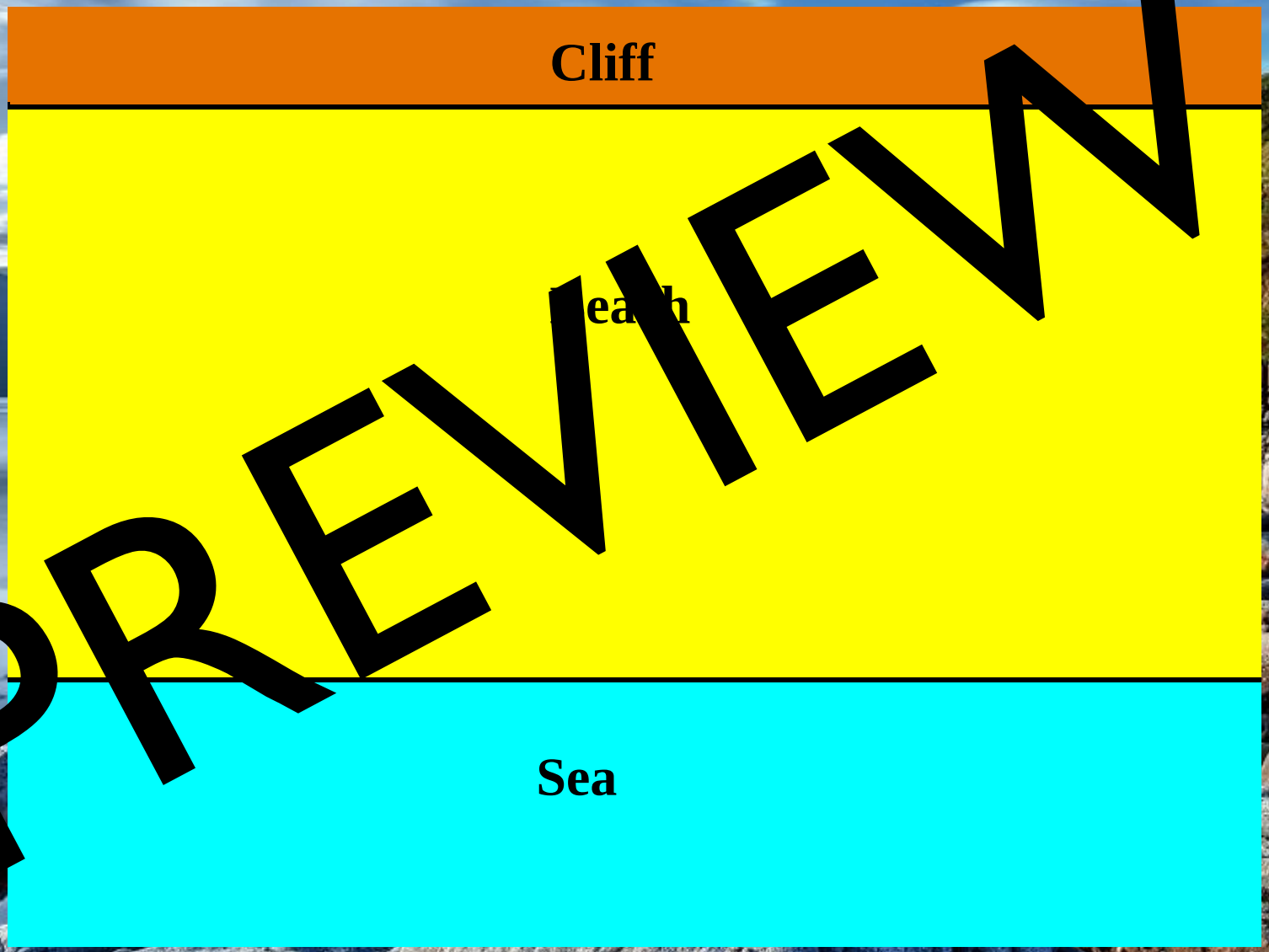
Complete your erosion sheet

Longshore Drift

- **"Longshore drift** is a process by which sediments such as sand or other materials are transported along a beach"
- The general direction of longshore drift around the coasts of the British Isles is controlled by the direction of the dominant wind


http://www.bbc.co.uk/learningzone/clips/the-coastline-longshore-drift-and-spits/3080.html
PREVIEW

Longshore Drift: A bird's eye view



Longshore Drift: A bird's eye view

Cliff

Eroded material from the cliffs is left on the beach

Beach

Sea

Longshore Drift: A bird's eye view

Cliff

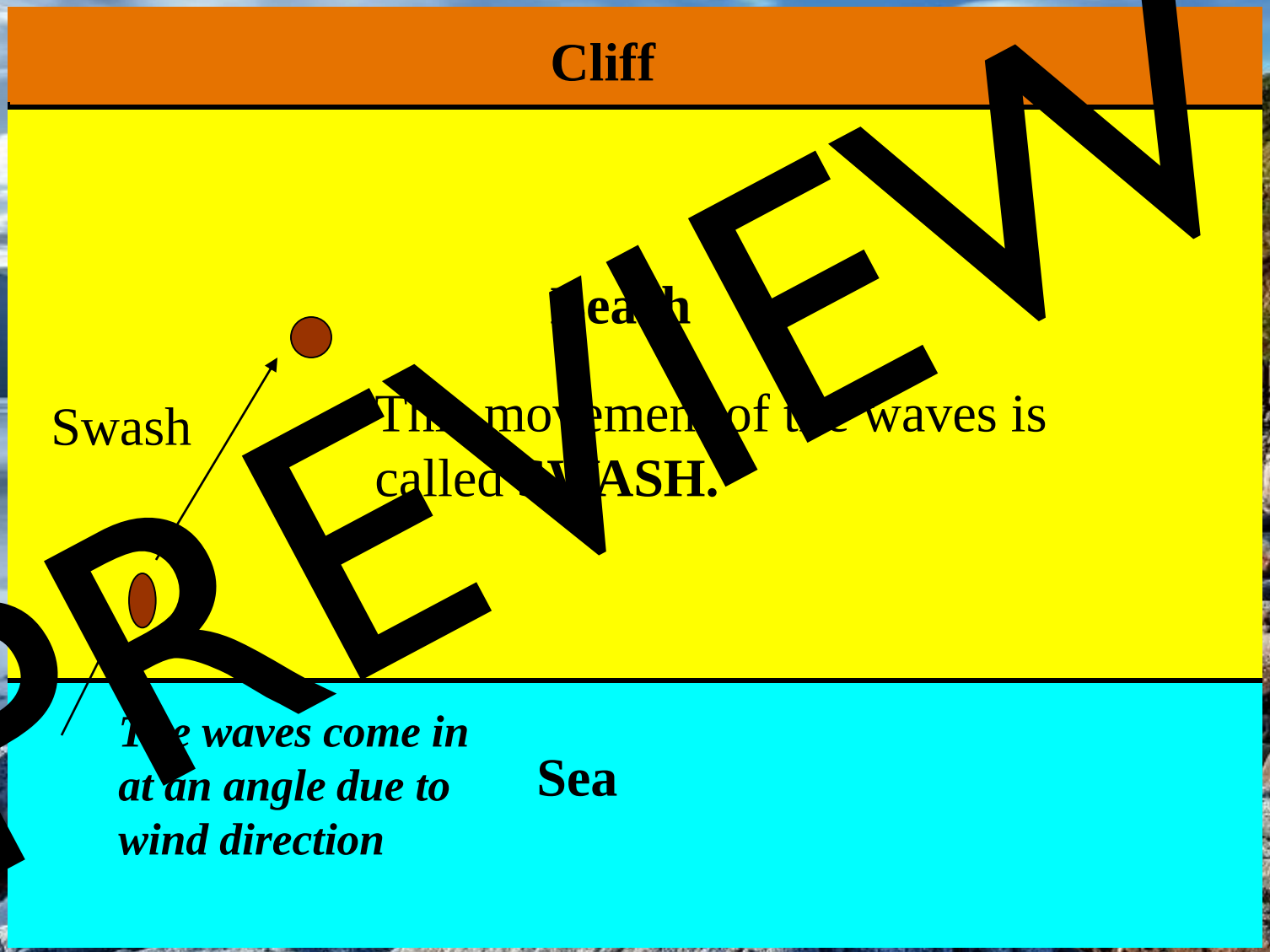
Beach

Waves

The waves from the sea come onto the beach at an angle and pick **Bob** and other material up and move them up the beach.

Sea

Longshore Drift: A bird's eye view



Longshore Drift: A bird's eye view

Cliff

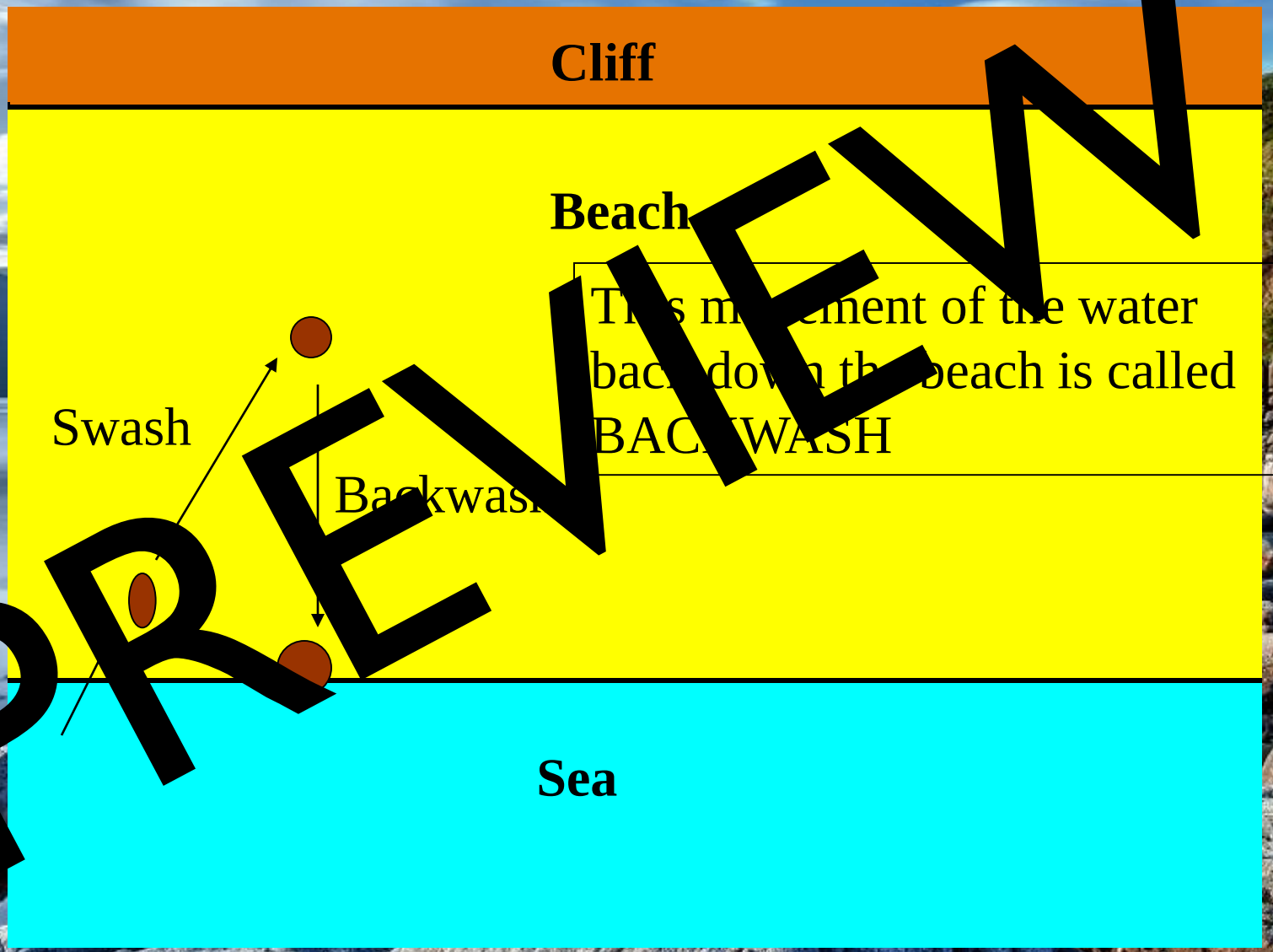
Beach

The waves then move back down the beach in a straight direction due to gravity. They take **Bob** and the other eroded material with them

Swash

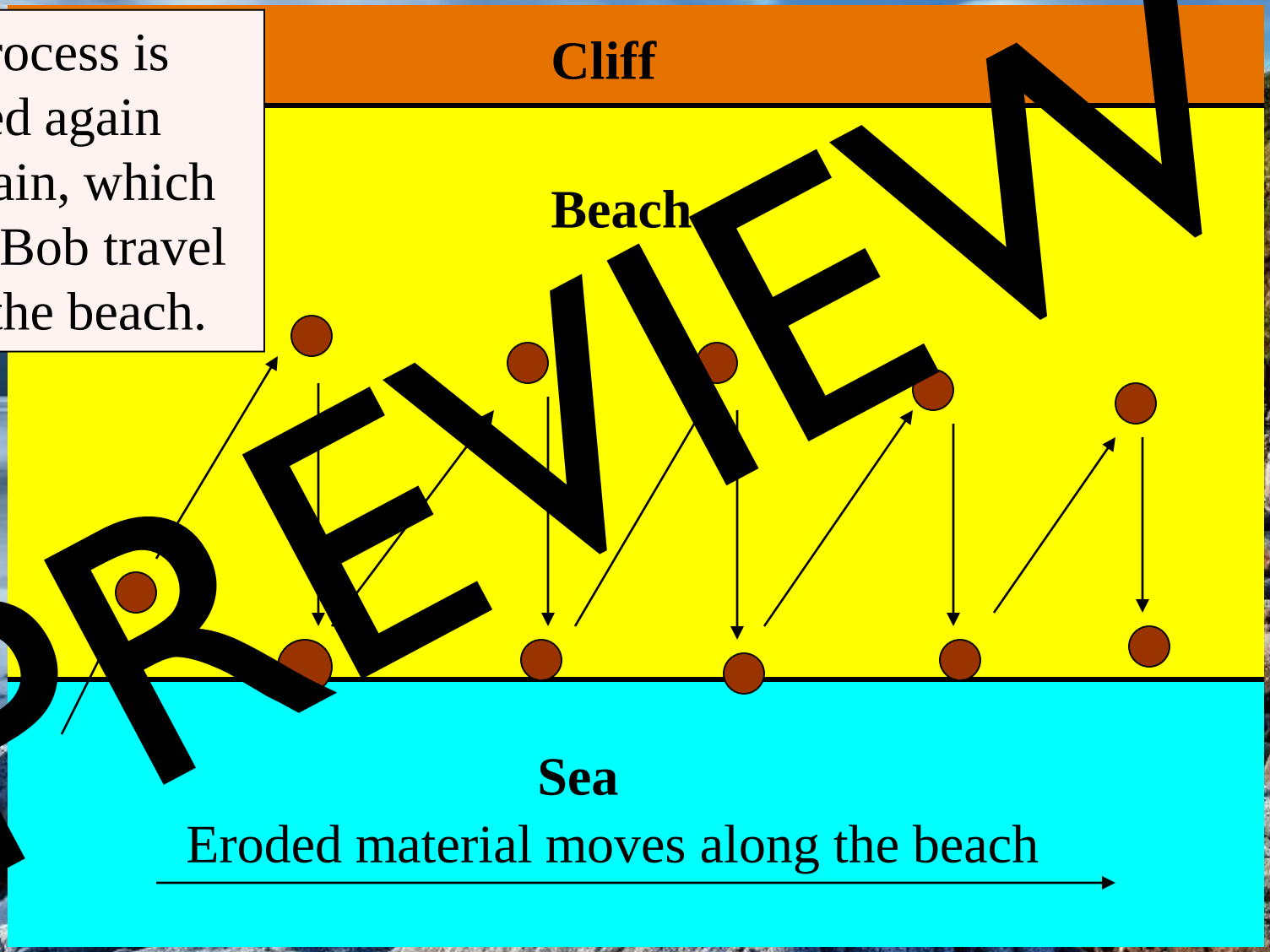
Sea

Longshore Drift: A bird's eye view



Longshore Drift: A bird's eye view

This process is repeated again and again, which makes Bob travel ***along*** the beach.



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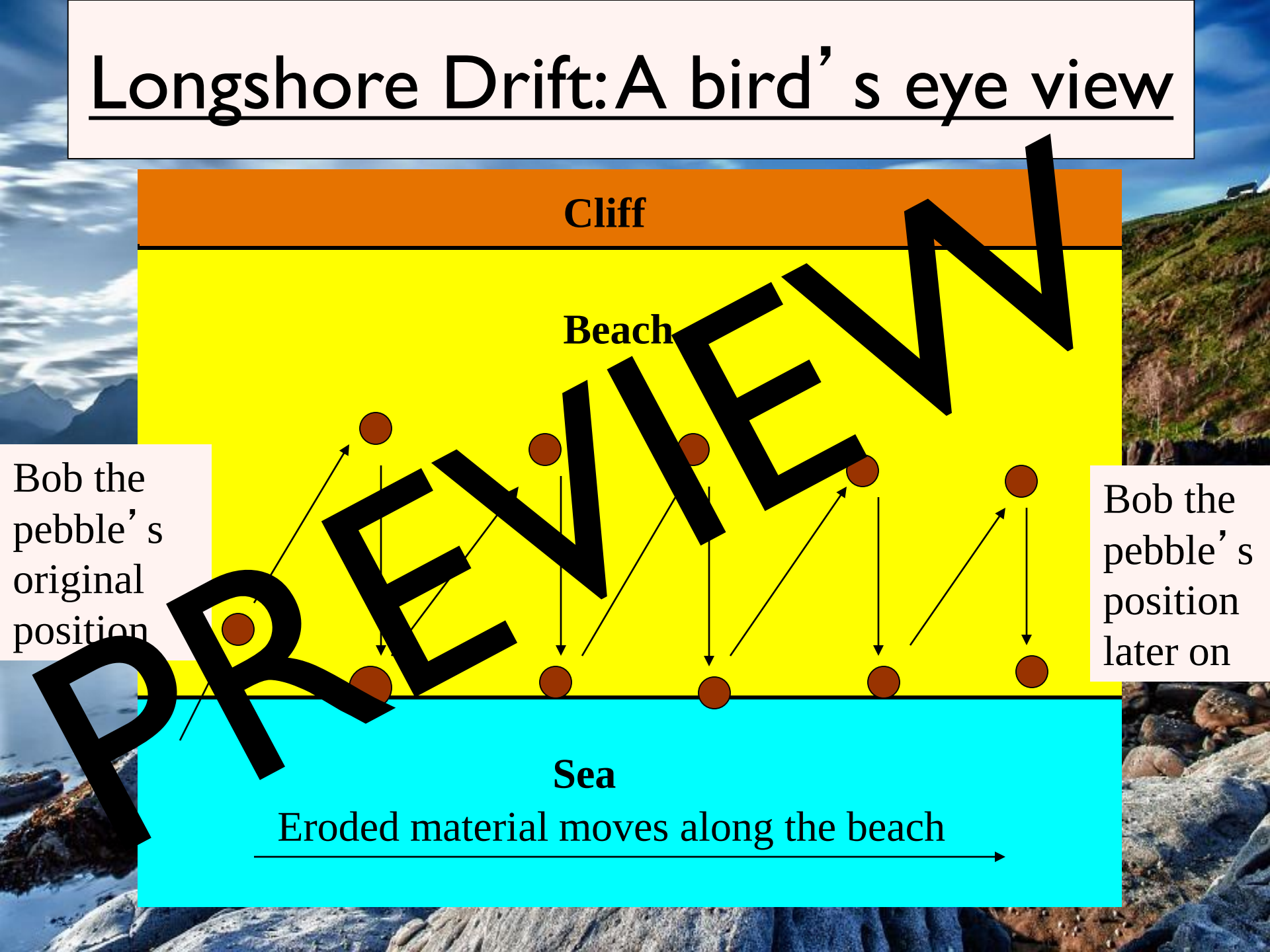
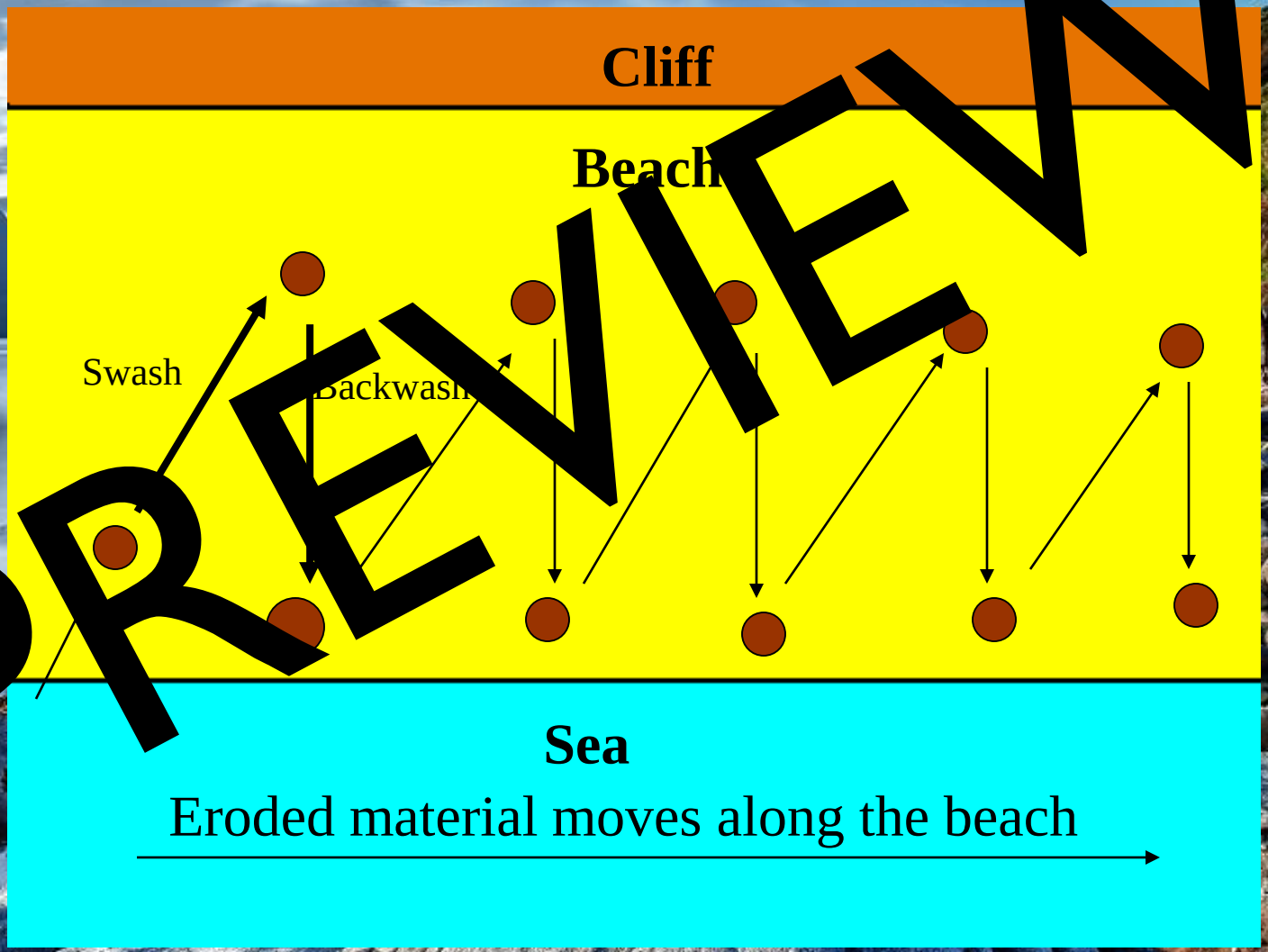


Longshore Drift: A bird's eye view



Task

Complete your longshore drift sheet

Ext – Imagine the class are on a coastal field trip. What evidence would you look for on the coast to show longshore drift is occurring?

Copy the definitions below and draw a diagram to show the transportation processes occurring

- **Traction -** the rolling of large material along the sea floor by the waves.
- **Saltation -** the bouncing of slightly lighter material along the sea floor.
- **Suspension -** Small particles of material carried by the water.
- **Solution -** Material is dissolved and carried by the water.

What have we learnt today?

Aim

- To understand process acting on the coast that lead to landforms