



HOMEWORK BOOKLET

Year 7 Term 3



Types of Rock Match and Draw

Homework 1

Draw **one** line from each statement to the type of rock it describes.

Made when molten rock cools and solidifies.

Non-porous rocks that often contain thin bands or layers.

Formed when pieces of weathered and eroded rock are deposited, compacted and cemented together.

May contain fossils.

May contain large or small crystals depending on how quickly the rock formed.

Made when other types of rock are subjected to an extremely high temperature and pressure.

sedimentary rock

igneous rock

metamorphic rock

Weathering and Erosion

This limestone sculpture has been located in a park for several decades. There are holes on the surface of the sculpture.

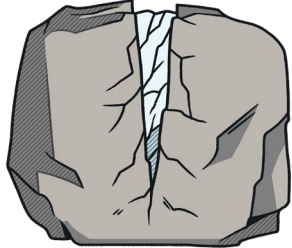


1. Which type of weathering is most likely to have caused the holes? Tick **one** box.

- biological weathering
- chemical weathering
- physical weathering

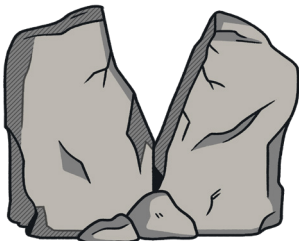
The diagrams below show the stages of a type of physical weathering known as freeze-thaw weathering.

2. Write a number from 1 to 3 in each box below to put the steps of freeze-thaw weathering in the correct order.



When the temperature decreases, the water freezes.

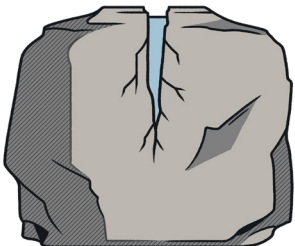
The ice expands in the crack.



The process is repeated many times.

The crack increases in size.

The rock will break apart.



Water fills the crack in the rock's surface.

3. Complete the sentences.

In biological weathering, plant _____ get into small _____ in rocks.
As the roots start answer line, they make the cracks_____.

When rocks are broken up by weathering, small pieces of rock called sediments are made.

4. Which process involves the weathering of rocks and the transportation of sediments?

Tick **one** box.

- compaction
- erosion
- sedimentation

5. Describe **one** method of transporting sediments.

Rock sediments are often pointed or jagged.

Pebbles are usually smooth and round.



6. Describe how pebbles are formed.

keywords to use: collide sediments transported



The Four Types of Coastal Erosion

Match and Draw

Draw **one** line from each keyword to the correct description.

attrition

The sheer force of the water driving air into cracks in the rock and making them deeper and wider eventually they will break down.

abrasion/
corrasion

Rocks carried in a body of water smash together and break into smaller, smoother and rounder particles.

hydraulic
action/power

The break-down of rocks caused by a chemical change within the rock. At the coast, this type of weathering is often the result of the seawater containing certain minerals that react with, change and dissolve the minerals in the rocks.

solution

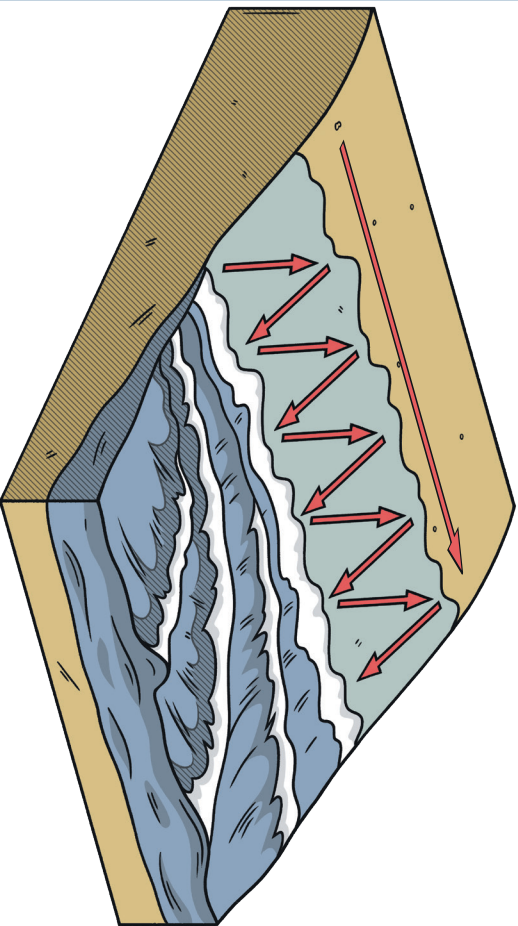
Erosion caused by the sandpaper effect of rocks and boulders.

Homework 2

Longshore Drift Learn to Draw

Copy the diagram of longshore drift into the box on the right. Then correctly annotate the diagram. Don't forget to draw with a pencil. Only use colouring pencils if you think it will help to explain the process of longshore drift.

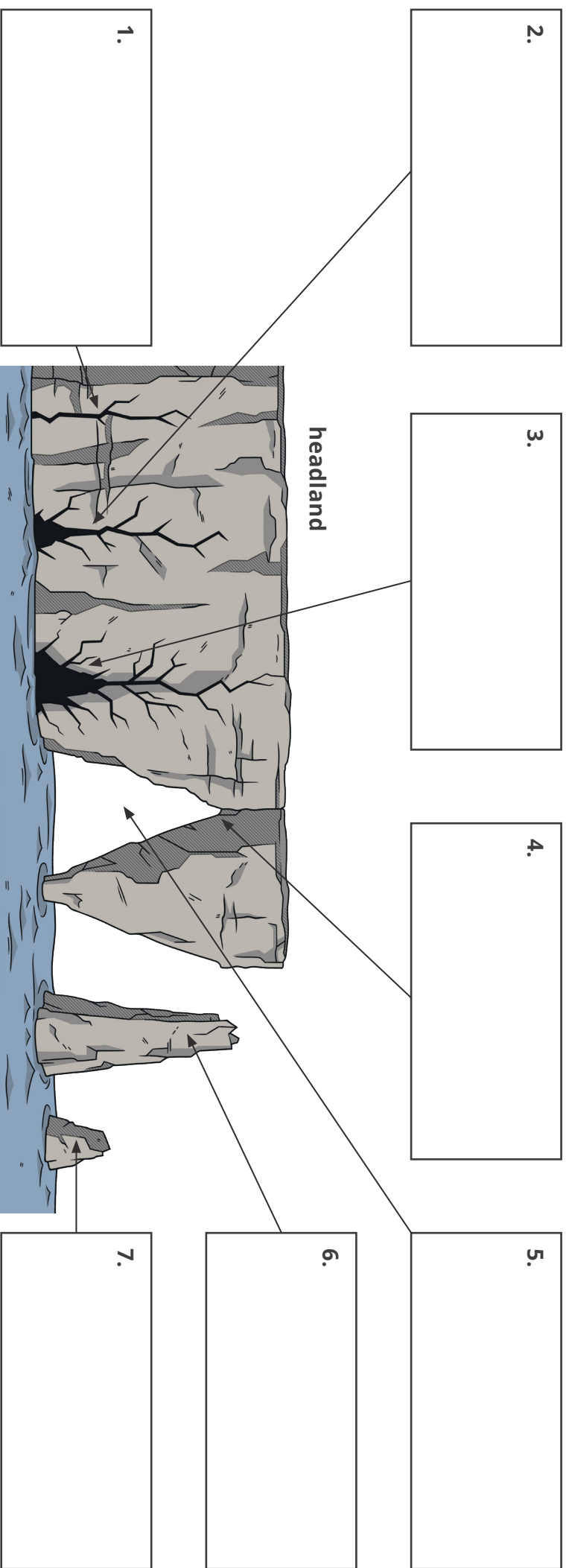
Longshore Drift



Homework 3

Caves, Arches, Stacks and Stumps Labelling Activity

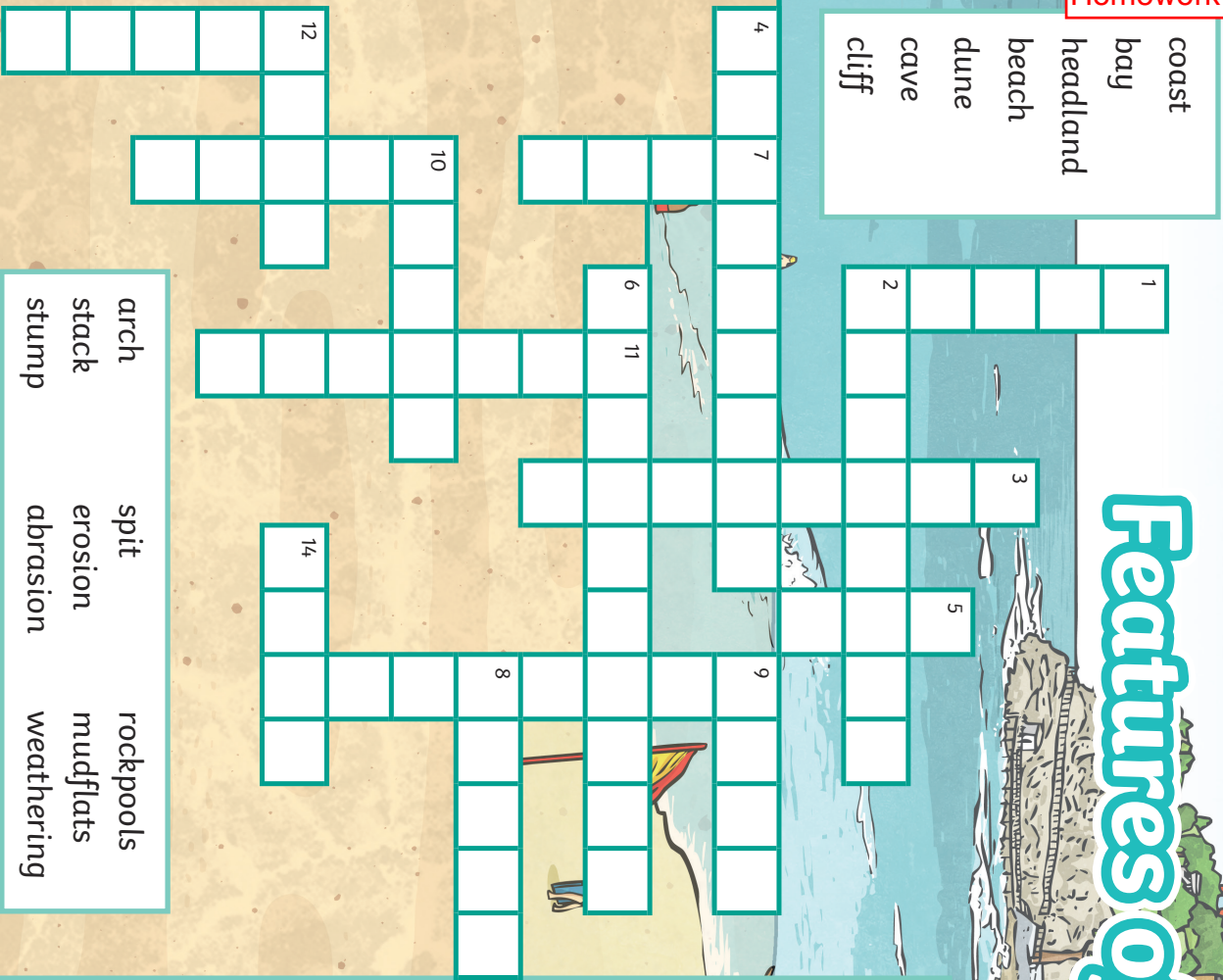
Add labels to the diagram to show the key features and processes of coastal erosional landforms.



Labels

- Erosion continues. The cave breaks through the headland forming an arch.
- After the collapse of the arch all that is left behind is a tall rock stack.
- Hydraulic action and abrasion continue to erode the crack until it forms a cave.
- The stack continues to be eroded, eventually forming a stump.
- Eventually, the arch collapses.
- Hydraulic action creates a crack in the cliff face.
- Erosion continues and the caves widens.

Features of Coasts



coast
bay
headland
beach
dune
cave
cliff

arch
stack
stump

spit
erosion
abrasion

rockpools
mudflats
weathering

Across

- 2. A piece of land that projects from the coast out into the sea, caused by erosion.
- 4. Small pools of seawater that are a microhabitat for some sea creatures.
- 6. A natural process that slowly breaks apart or changes rock.
- 8. What is left behind after the erosion of a stack.
- 9. When a cave has formed in a headland and broken through to the other side of a cliff.
- 10. The area where the land and sea meet.
- 12. A narrow strip projecting out into the sea, formed when beach material is deposited.
- 14. A pile of sand that has formed inland after being blown by the wind.

Down

- 1. An area of land covered with sand or pebbles found at the edge of a body of water.
- 3. Caused by the deposition of silt and other materials such as clay. Usually found in estuaries.
- 5. A body of water that is connected to the sea. It is usually more sheltered here.
- 7. A natural chamber that occurs when a cliff has been eroded by the sea and other materials.
- 9. The wearing away of land by rocks and pebbles.
- 10. Tall, steep rocks that were created by erosion.
- 11. The wearing away of land by forces, such as water, wind and ice.
- 12. What is left behind when the top of an arch collapses into the sea.