4 Weather and climate – Part 2

Name: _____ Class: _____ Date: _____

Vocabulary

Write each word three times.

English	**Write it 3 times** (English)		
global wind patterns			
Coriolis effect			
watershed			
rain shadow			
El Niño			
La Niña			

Recall

You already notice weather and seasons:

- The Sun heats the equator more than the poles.
- Winds blow in fairly steady directions.
- Summer and winter come and go through the year.

This sheet lines up what drives weather and climate. Each idea has a short worked example.

New ideas

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1 Global winds

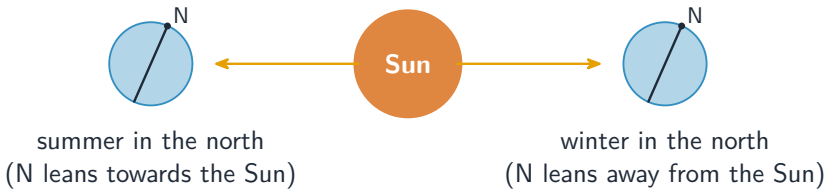
The Sun heats Earth unevenly, so warm air rises at the equator and sinks near the tropics, creating **global wind patterns** . The spinning Earth bends these winds – the **Coriolis effect** .

2 Watersheds

A **watershed** is all the land that drains into a shared body of water. Whatever happens on that land – farming, paving, pollution – ends up in the water it drains into.

3 Seasons come from the tilt

Seasons come from Earth's **tilted axis** (about 23.5°), not its distance from the Sun. The hemisphere tilted **toward** the Sun gets more direct light and longer days – summer.



4 Climate patterns

Geography shapes climate: latitude, height, and nearness to oceans. Mountains create a **rain shadow** (wet on the windward side, dry on the leeward side). **El Niño** and **La Niña** are shifts in Pacific temperatures that change rainfall worldwide.

Watch out: seasons are caused by the Earth's **tilt**, not by how close it is to the Sun. In fact the Earth is slightly closer to the Sun during the northern winter.

Practice

Try these in order. The methods are all above.

2.1 State what causes global wind patterns. [2]

2.2 State what a watershed is. [2]

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2.3 Explain what really causes the seasons. [2]

2.4 Explain why one side of a mountain range is much drier than the other (a rain shadow). [2]

2.5 State what El Niño and La Niña are. [1]

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