

Worksheet: Plate Tectonics

Find the major tectonic plates of the world!

Purpose: This participation and discussion exercise enables students to discover for themselves 9 major tectonic plates of the world.

Objectives: Students will be able to:

- > geographically illustrate the major tectonic plates
- > discover Abu Dhabi's location in relation to the Arabian and Eurasian Plates
- > distinguish between convergent, divergent and sliding boundaries

Skills: Students can demonstrate:

- > Researching & Illustrating
- > Communicating & Observing

Time Required: 40 minutes.

Group Size: In small groups of 4.

Materials/Preparation: Includes:

- > Access to the internet for each group
- > The Major Tectonic Plates sheet
- > An A3 printed copy of the plain World Map for each group
- > Pencils and erasers for each group
- > A copy of the Plate Tectonics teacher briefing

Background: The Earth's crust is divided into a series of plates that are continually moving, colliding or pulling apart relative to each other.

The Earth's crust consists of nine large plates and twelve smaller ones. The continents are in the continental plates and the oceanic plates make up much of the sea floor. Heat rising and falling inside the mantle creates convection currents generated in the Earth's core. The convection currents move the plates. Where convection currents diverge near the Earth's crust, plates move apart. Where convection

currents converge, plates move towards each other. The movement of the plates and the activity inside the Earth is called plate tectonics.

Activity: Follow these steps:

1. Print off all the materials described above.
2. Spend 20 minutes engaging students in the formation of the Earth and in plate tectonics. (prepare by reading the Teacher Briefing).
3. Provide each small group with an A3 World Map and pencils and erasers and task them with:

a) identifying each of the following plates:

1. Eurasian Plate
2. Arabian Plate
3. African Plate
4. Antarctica Plate
5. Australian-Indian Plate
6. North American Plate
7. South American Plate
8. Nazca Plate
9. Pacific Plate

b) drawing the boundary lines onto the World Map and labelling each Tectonic Plate.

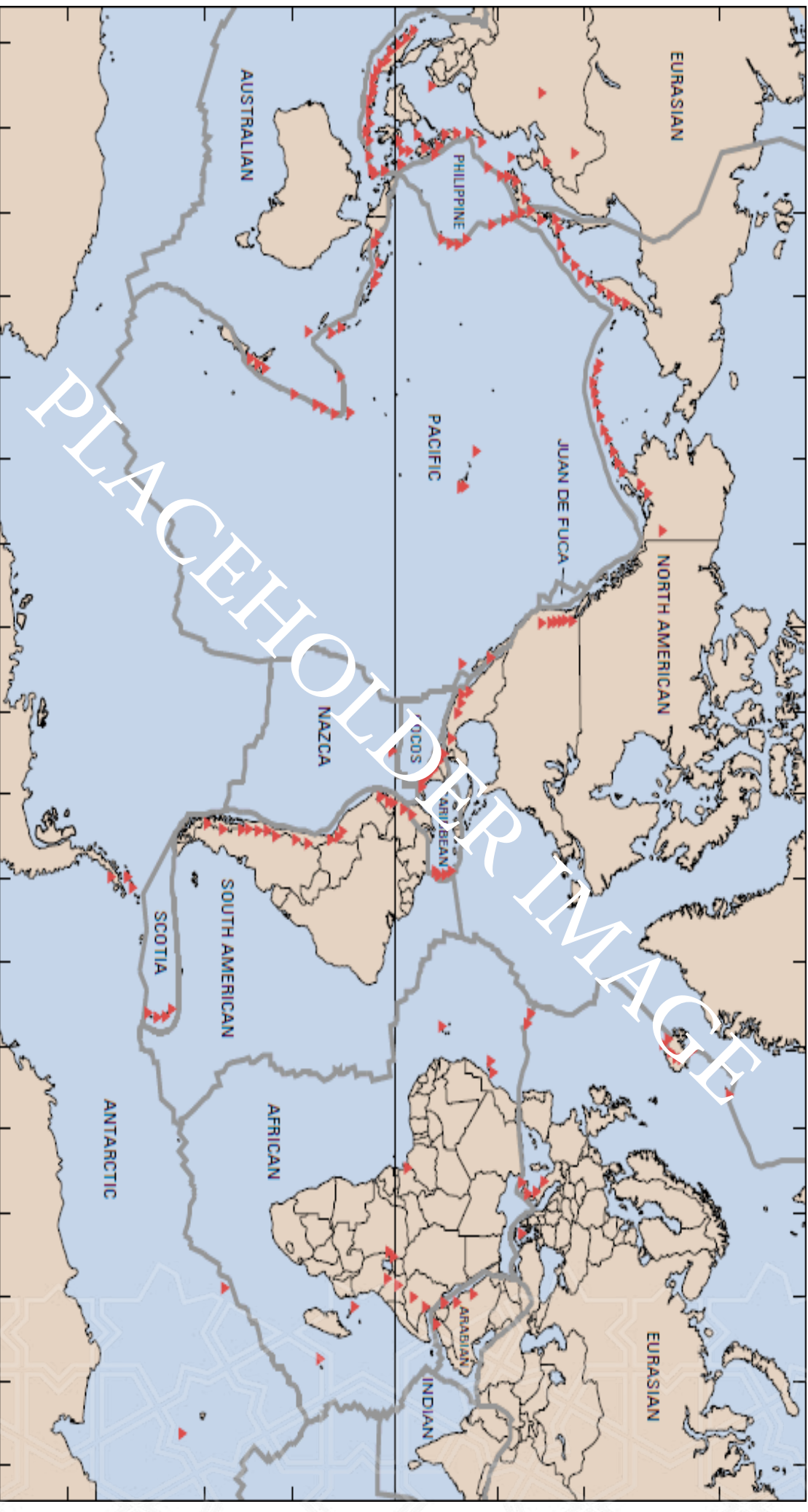
4. Review the students discoveries and accuracy in illustrating and labelling each Tectonic Plate.

5. Use the Major Tectonic Plates sheet to compare and add to any extra findings.

Closure: Ensure each group has corrected any incorrectly illustrated and/or labelled Tectonic Plate.

Extending the Lesson: Encourage students to do some research on minor plates and hotspots along boundary lines.

Major Tectonic Plates





The Major Tectonic Plates of the World