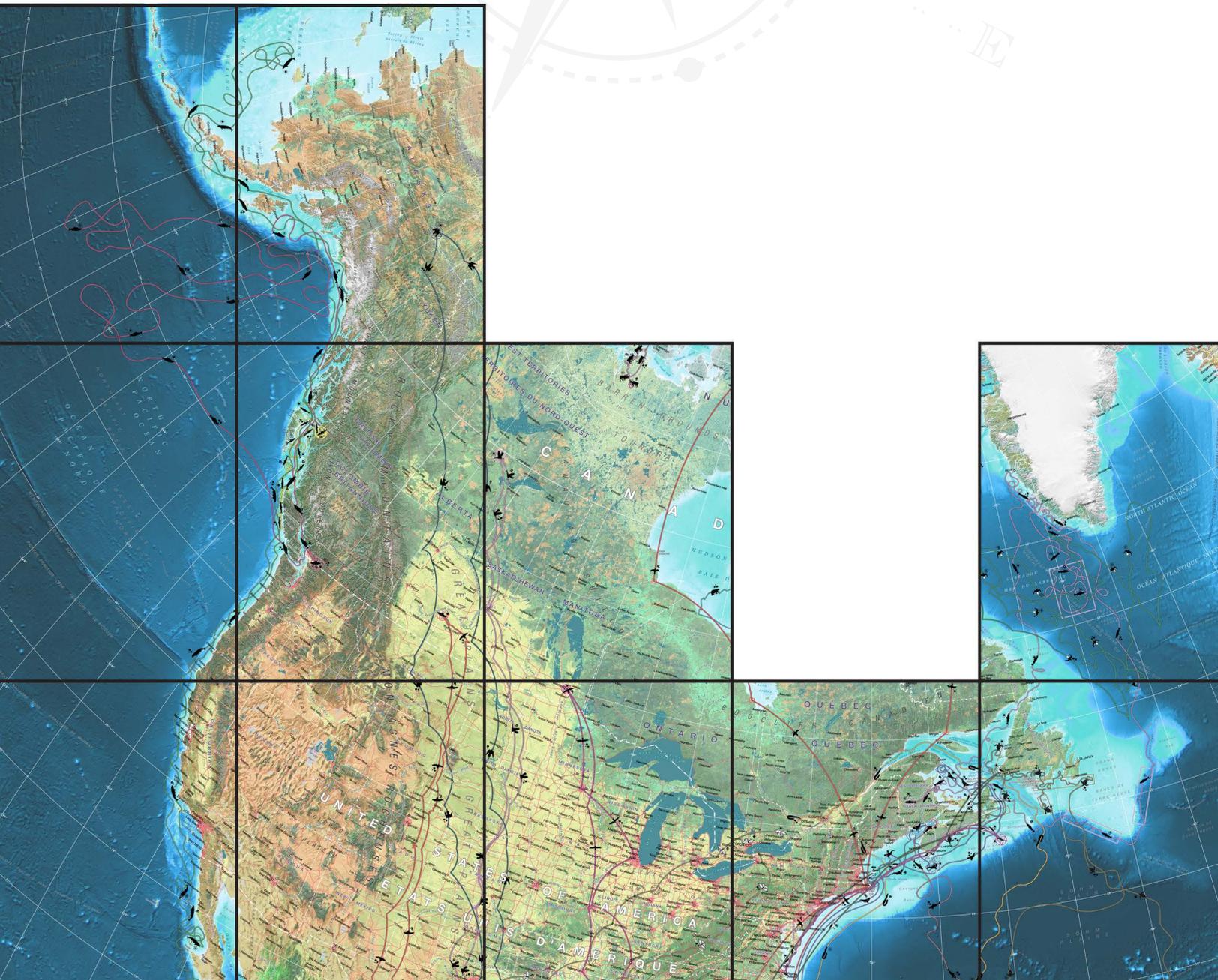


TILED MAPS

INTERMEDIATE

(Grades 7 - 10, Sec. I - IV)



INTERMEDIATE

INTRODUCTION

Spatial thinking is a powerful and useful geographic skill that strengthens student **collaboration** and **communication** and is key to active citizenship in our increasingly global and technological society. Spatial thinking allows students to identify, understand and analyze phenomena related to the spaces around them, recognizing location, scale, patterns, trends, and relationships.

Canadian Geographic Education, in partnership with the S.M. Blair Foundation, is proud to build on the success of their **tiled map program** and offer this instructional booklet. This resource provides teachers with the opportunity to strengthen their lessons plans and enrich their geography classes with hands-on interactive activities, centred on Can Geo Education's tiled maps. Students will explore the basics of geography, mapping skills, and physical and human geography.

Spatial thinking remains a **fundamental skill** that underpins the geographic toolkit that we aim to impart onto our students over the course of their kindergarten to grade 12 or secondary 5 (Quebec) education.



MAP READING SKILLS

Hand out different tiled maps to the class. Have them piece them together then circulate around the class to see the different maps. They must **identify the different types of maps and their uses**.

Using the **Barrage Tiled Map**, have students **observe the contour lines** and choose a section of the map to work on in a small group. They can stack cubes to represent the levels of elevation on the map. One cube could equal 10 m. Encourage students to think about the creeping barrage military strategy used by the Canadians to take Vimy Ridge. Using LEGO men to represent the troops, ask students how they would have gone about taking the Ridge, taking into account the elevation. Have students share their different **strategies** with the class.

Distribute the **Tiled Maps of Canada's provinces and territories** to small groups. Ask students to **locate the scales** and identify them (linear and representative fraction scales). Task the groups with planning a road trip between two places on their map. They will have to calculate the distance between them using the two different scales. Next, ask the groups to pair up with a neighbouring province or territory, put their maps together, and plan a trip that would take them from one province to the other. They must **calculate the total distance travelled**. They may do research to find ferries and airports, if necessary.

INTERMEDIATE



HUMAN GEOGRAPHY

Using the [Tiled Map of Canada](#), have students locate the **most populated cities** with a counter or a marker (if the maps are laminated). Divide the class into groups and assign each group a city. Ask them to look up the most recent census data (<http://www12.statcan.gc.ca/census-recensement/index-eng.cfm>) to find the exact population and land area for their city. Have them calculate the **population density** (population divided by land area) and write it next to their city (on the laminated tile or on a sticky note). Let students choose another city or town on the map that they think would have a lower population density. Once students have calculated all the population densities, get them to classify the cities according to high, medium and low population densities. Associate colours with each one or make a coloured mark on the map accordingly. Have students observe the densities and look for **trends**. Where are the higher density cities located? Why? Where are the lower ones located and why?

Ask students to **research where immigrants settle** once they come to Canada (<http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-010-x/99-010-x2011001-eng.cfm>). Using a laminated version of the [Tiled Map of Canada](#), have students create a symbol to represent the **immigrant culture** that they researched and place those symbols in the appropriate areas on the map. Discuss as a class why migrants might choose to leave their home country (push factors). Discuss why certain cultures might be drawn (pull factors) to certain areas of Canada.



PHYSICAL GEOGRAPHY

Distribute a province or territory from the [Tiled Maps of Canada's provinces and territories](#) to small groups. Task them with **researching a natural disaster** that took place in their assigned province or territory. They must identify what type of disaster it was, where it took place, and its effects. Have them identify the disaster on their map and then put all the map pieces together with the other groups. Give the class a few minutes to observe the different disasters and where they are located. Discuss the possible reasons for the locations of the disasters (nearby fault line, situated in a valley, in proximity to a body of water, etc.).

Have students research the many **natural resources** of the Arctic and locate them on the [Arctic Circumpolar Tiled Map](#). Discuss with students the potential of undiscovered natural resources and the issues surrounding them (to whom do they belong, extracting them will have consequences, impacts on local indigenous populations, etc.).