1) Read Chapters 2, 3, and 4 in *Making Connections*. Check your understanding of this topic by defining the terms in **bold letters** that appear throughout these chapters. It is important to understand these terms in order to utilize them correctly throughout this unit of the course. If you would like an official definition for each term, they are listed in the glossary at the back of the textbook.

2) List the six basic features of a map – the “map essentials”. These are the things that are required on every map you create! (You’ll always want to add a “seventh” map essential for purposes of a school assignment: your first and last name.)

3) Draw a sketch map of the classroom (or, if it’s nice outside and your teacher is willing, the school property). Make sure that all of the features you listed from question 2 are included on your map.

4) Review the sections of Chapter 2 on Large- and Small-Scale Maps, Types of Maps, and Geotechnology: Digital Maps which were all presented to you in the slideshow as part of this lesson.

5) Using the topographic map on the next page (which is in colour in your text on page 25), answer the following questions:
   a) What does the colour green indicate on a topographic map?
   b) In which direction does Indian Brook flow? How did you determine this?
   c) What features are found at the following letters?
      i) A
      ii) B
      iii) C
      iv) D
      v) E
      vi) F
   d) Consider the kinds of symbols that are used to represent features on a topographic map. Can they be understood without reference to a legend that explains them all?

6) Using the section of the Official Road Map of Ontario and legend shown on page 33 of your text, answer the questions listed on page 32.

7) Complete the activities in the shaded beige boxes on page 34 of your text.
8) Using an atlas, draw and label the major lines of latitude and longitude on the world map shown below.
   a) Equator, Tropic of Cancer, Tropic of Capricorn, Arctic Circle, Antarctic Circle
   b) Prime Meridian, International Date Line
9) a) Using an atlas, determine the names of the major cities at the following locations:
   i) 47°N 52°W
   ii) 39°N 116°E
   iii) 23°S 43°W
   iv) 6°S 106°E
b) Label each of these places on the world map in question 8.

10) a) Using an atlas, determine the location (longitude and latitude) of the following capital cities:
    i) Ottawa, Canada
    ii) Cairo, Egypt
    iii) Santiago, Chile
    iv) Wellington, New Zealand
    v) Kampala, Uganda
b) Using the 0° latitude and 0° longitude as your starting points, in which hemisphere (northwestern, northeastern, southwestern, southeastern) is each capital located?

11) One of the map essentials is scale. You must calculate the scale on every map that you create. **Follow this procedure to calculate scale:**
    a) Determine the actual distance in kilometres between two cities that appear on your map. You can look it up online (in Google Maps, for example) or calculate it using an atlas by following the procedures on pages 45-47 of your text.
    b) Measure the distance in centimetres between those same two cities on your map.
    c) Actual distance in kilometres ÷ Measured distance in centimetres.
    d) On your map, write 1 cm = ___ km, inserting the number you calculated in c).

12) Use an atlas to find the straight-line distance between the locations listed below. Use the direct statement scale found in the atlas.
   a) Wiarton, Ontario (in the Bruce Peninsula) and Port Dover, Ontario (on Lake Erie)
   b) Gananoque, Ontario (near Kingston on the St Lawrence River) and Aylmer, Quebec (near Ottawa on the Ottawa River)
   c) Sault Ste. Marie, Ontario (between Lake Superior and Lake Huron) and Timmins, Ontario (northeast of Sault Ste. Marie)

13) Find the maps in an atlas that show the following pairs of cities. Measure the straight-line distances between the two cities. Use the representative fraction scale shown on the map to calculate the distance in kilometres.
   a) London, United Kingdom and Rome Italy (map of Europe)
   b) Havana, Cuba and Miami, United States (map of the Caribbean)
   c) Prince Rupert and Bella Coola, British Columbia (map of western Canada)
   d) Yarmouth, Nova Scotia and Bathurst, New Brunswick (map of eastern Canada)