Manitoba Clock Investigation

Monday, November 23, 2026. Your Winnipeg class is arranging a live call with classes in Vancouver, Calgary and Toronto. Each class can join from 10:00 to 12:00 on its own clock, including both endpoints.

Name _____

What changed? Manitoba kept its clocks at UTC−5 in November 2026 and now uses Manitoba Standard Time (MBT) year-round. UTC (Coordinated Universal Time) is a common reference clock. UTC−5 means a local clock shows five hours earlier than UTC.

Try the method. At 08:00 in Winnipeg, add 5 hours to get 13:00 UTC. On this date, Halifax is UTC−4, so subtract 4 hours to get 09:00 in Halifax.

1 Find the local times

Use the offsets and a 24-hour clock. Write the UTC time for each proposed start, then complete the table.

11:00 Winnipeg = _____ UTC **12:00 Winnipeg** = _____ UTC

City	UTC offset	At 11:00 Winnipeg	At 12:00 Winnipeg
Vancouver	UTC−7		
Calgary	UTC−6		
Winnipeg	UTC−5	11:00	12:00
Toronto	UTC−5		

2 Choose a start time

Which proposed start works for all four classes? Show one clock time that rules out the other start.

3 Move the call to July

On July 23, 2027, Toronto is on daylight saving time (UTC−4). Winnipeg stays at UTC−5. If Winnipeg starts at 12:00, what time is it in Toronto? Can that class join?

Use the new clock tables

Use Monday, November 23, 2026 as the reference date throughout. **SW** = Student Workbook. **AW** = Accommodated Workbook. Page numbers match the buyer PDFs.

Lesson 3 / Canadian clocks

At 12:00 Winnipeg (17:00 UTC)

City	UTC offset	Local time
Vancouver	−7	10:00
Edmonton / Calgary	−6	11:00
Winnipeg	−5	12:00
Toronto	−5	12:00
Halifax	−4	13:00
St. John's	−3:30	13:30

Official names on this date
Vancouver uses Pacific Time (PCT).
Edmonton and Calgary use Alberta Time (ABT).
Winnipeg uses Manitoba Standard Time (MBT).
Toronto uses Eastern Standard Time (EST).

Lesson 4 / World clocks

At 18:00 UTC on Mon, Nov 23

City	UTC offset	Local time
Vancouver	−7	11:00 Mon
Winnipeg	−5	13:00 Mon
Halifax	−4	14:00 Mon
London	+0	18:00 Mon
Cairo	+2	20:00 Mon
Moscow	+3	21:00 Mon
Mumbai	+5:30	23:30 Mon
Beijing	+8	02:00 Tue
Tokyo	+9	03:00 Tue
Sydney	+11	05:00 Tue

Use with Lesson 3

SW and AW pp. 17–20 | Hook, reading, table, map, worked example
Use the Canadian clocks above. When Winnipeg reads noon, Toronto also reads noon. The Halifax example becomes 13:00 (1:00 p.m.), one hour ahead of Winnipeg.

SW p. 21 and AW p. 21 | Q4
Vancouver PCT 10:00, Edmonton ABT 11:00, Toronto EST 12:00, Halifax Atlantic Standard Time (AST) 13:00.

SW p. 22 and AW p. 23 | Exit 1
At Winnipeg 15:00, Toronto is 15:00 and Halifax is 16:00.

Teacher Guide pp. 8, 14–15
Use the dated prompts, tables and keys here. The 15:00 Winnipeg to 13:00 Vancouver example still works. For support, count from the offsets above.

Use with Lesson 4

SW pp. 23–25 and AW pp. 24–26 | Warm-up, reading, table
Warm-up 1 is MBT (UTC−5). For Warm-up 3, ask how many 15° bands fit around Earth (24). At 18:00 UTC, Winnipeg reads 13:00. Manitoba uses UTC−5 year-round.

SW pp. 26–27 and AW pp. 27–28 | Example and Q3–Q4
The example gives Sydney 05:00 Tuesday. In Q3, Cairo is 20:00 Mon and Tokyo is 03:00 Tue (past midnight). Q4 at noon UTC gives Winnipeg 07:00 (−5), London 12:00 (+0), Mumbai 17:30 (+5:30), Sydney 23:00 (+11).

SW p. 28 and AW p. 30 | Exit 1
Change the given offset to UTC−5. At 20:00 UTC, Winnipeg is 15:00.

Teacher Guide pp. 16–17
In the 18:00 UTC number-line activity, count back 5 hours for Winnipeg.

Map note. The workbook's 15° bands illustrate Earth's rotation. Actual offsets and boundaries follow local rules. For clock calculations, use the named city and its dated offset.

Check student answers

Use the replacements below with the November lesson. The replacement questions use the same mark totals as the original items.

Investigation key

City	11:00 Winnipeg = 16:00 UTC	12:00 Winnipeg = 17:00 UTC
Vancouver	09:00	10:00
Calgary	10:00	11:00
Winnipeg	11:00	12:00
Toronto	11:00	12:00

2. Pick 12:00 in Winnipeg. An 11:00 Winnipeg start gives Vancouver 09:00, one hour before its window. **3.** At 12:00 in Winnipeg, Toronto is at 13:00 in July (17:00 UTC minus 4 hours). Toronto's window has ended.

Quiz 1 / Teacher Guide pp. 31–32 · key p. 6

Q4 (1 mark), p. 31. Reword the question to "How many zones are shown in the traditional Canadian model?" Keep the choices. **Answer A** is six.

Q5 (1 mark), p. 32. Ask "What is Winnipeg's official UTC offset on November 23, 2026?" Change option C to UTC−5. **Answer C** is UTC−5.

Q8 (2 marks), p. 32. "It is 12:00 noon in Winnipeg on November 23, 2026. Winnipeg is UTC−5, Toronto is UTC−5 and Vancouver is UTC−7. What time is it in Toronto and in Vancouver?" Award 1 mark for **Toronto 12:00 noon** and 1 for **Vancouver 10:00 a.m.**

Unit Test / p. 7 · key p. 3

Q18 (4 marks). "It is 10:00 a.m. on Monday, November 23, 2026 in Winnipeg (UTC−5). What time and day is it in London (UTC+0) and in Tokyo (UTC+9)? Show your work."

Award 1 mark each for **15:00 UTC**, **15:00 Monday in London**, **00:00 in Tokyo** and **Tuesday in Tokyo**. From 15:00 UTC, adding 9 hours reaches midnight at the start of Tuesday.

For work already assigned using the printed offsets, credit answers that follow the stated model. Quiz 1 Q5 is C (UTC−6). For Q8, Toronto is 13:00 and Vancouver is 10:00. Unit Test Q18 gives 16:00 UTC, London 16:00 Monday and Tokyo 01:00 Tuesday. Also credit accurate current-time answers if students were working from the November update.

For Unit Test Q17, use "idealized time-zone band" for the 15° model. The rotation calculation and existing mark points still apply.

Update the atlas clock field

Use with Student Workbook pp. 67–68 and Accommodated Workbook pp. 71–72. Replace the reference offset in Step 3 and the offsets in Data Table 1. This table also updates the Teacher Guide p. 30 and the samples in Answer Key and Rubric p. 9.

Read or post for students. It is 12:00 noon in Winnipeg (UTC−5) on Monday, November 23, 2026. Use each city's dated offset to find its local time. Write both the time and the day in your atlas profile.

Atlas key at 17:00 UTC on Monday, November 23

Place	UTC offset	Local time and day
Mexico City, Mexico	−6	11:00 Monday
Manaus, Brazil	−4	13:00 Monday
London, United Kingdom	+0	17:00 Monday
Oslo, Norway	+1	18:00 Monday
Cairo, Egypt	+2	19:00 Monday
Nairobi, Kenya	+3	20:00 Monday
Niamey, Niger	+1	18:00 Monday
Tokyo, Japan	+9	02:00 Tuesday
Mumbai, India	+5:30	22:30 Monday
Sydney, Australia	+11	04:00 Tuesday

Share the **place and offset** columns for the calculation. If a class already used the book's standard-time model, accept work based on 18:00 UTC and the model's city offsets. On this date Sydney is on daylight time (UTC+11).

Sample feedback, key p. 9. Update Cairo to 19:00 Monday and Tokyo to 02:00 Tuesday. A Tokyo answer that omits Tuesday still needs the date. In the London sample feedback, give the correct time as 17:00 Monday.

Time rules and curriculum

Manitoba's year-round Manitoba Standard Time

B.C.'s Pacific Time and PCT abbreviation

B.C.'s Pacific Time offset

Alberta's year-round Alberta Time

Ontario Time Act, s. 2 (Toronto)

Nova Scotia time rule (Halifax)

Newfoundland and Labrador Standard Time Act

United Kingdom clock changes (London)

New South Wales daylight saving dates

New South Wales daylight saving offsets

IANA Time Zone Database, release 2026f

Manitoba Grade 7 curriculum, 7-KL-020 and 7-KL-021

Companion to Milestone Teachers' Manitoba Grade 7 World Geography unit (TpT #18125182).