



The Solar Year: Veintenas, Nemontemi and Year Bearers

Module 4 handout · The 365-day side of the system

The xihupowalli divides the solar year into eighteen veintenas of twenty days — 360 days — and closes with the nemontemi, the days that belong to no veintena. Each veintena carries its own ceremonies. Only four day signs can carry a year, and each of those bearers opens its year on a fixed day sign, which is why years cycle in a bundle of fifty-two.

The eighteen veintenas

#	Veintena	Sense of the feast
1	Tlakaxipewalitzli	Renewal, the flaying of the old year's skin; planting.
2	Tozoztontli	The small vigil; first shoots and offerings of flowers.
3	Wei Tozoztli	The great vigil; the young maize is honored.
4	Toxkatl	Dryness; the feast of Tezkatlipoka.
5	Etzalkwalitzli	Eating of maize-and-bean stew; the rain workers.
6	Tekwilwitontli	The small feast of the lords; salt and the working women.
7	Wei Tekwilwitl	The great feast of the lords; food given to the people.
8	Tlaxochimako	Flowers are given; garlands for the images.
9	Xokotl Wetzi	The fruit falls; fire and the honored dead.
10	Ochpanitzli	The sweeping; cleaning, harvest and the earth mother.
11	Teotleko	The gods arrive; the return of the divine to the land.
12	Tepeilwitl	Feast of the mountains; the rain-bringing peaks.
13	Ketzalkoatl / Kecholli	The dart and the hunt; weapons are made.
14	Panketzalitzli	Raising of banners; the descent and rebirth of the sun.
15	Atemoztli	The water descends; the coming of winter rain.
16	Tititl	Stretching, the tightening of the year; the old mother.
17	Izkalli	Growth and resurrection; children are stretched, fire is honored.
18	Atlkawalo	The waters are left; petitions for rain.

Nemontemi

The days that close the year and belong to no veintena. They are days of rest, quiet and care — nothing new is begun, no contracts are made. They complete the solar count and hand the year over: the day of the observed equinox sunrise marks the bundling — the tying off — of the year, and the new year begins the day after.

The leap year

Despite a common misconception, the Mexika calendar absolutely had a leap year. Because of the natural cycle of the rising and setting of the sun, it takes an extra solar day every four years for the sun to return to its original starting point on the horizon. The system accounts for this simply: the last day of the nemontemi is repeated — extended across two days that carry the same tonalli. Sahagún and Durán both documented that a leap year existed. Without one, it would take only about 83 years for the calendar to shift by 20 days relative to the solar year, rendering it useless.

The four year bearers

	Sign	Direction	First day of the year	Character of the year
	Tochtli — Rabbit	South	Kozkakwawhtli	Fertility and plenty, or excess and drunkenness.
	Akatl — Reed	East	Zipaktli	Straightness, authority, order.
	Tekpatl — Flint	North	Mikiztli	Hardness, cutting decisions, scarcity.
	Kalli — House	West	Ozomahtli	Enclosure, rest, the inward and domestic year.

Each year bearer also fixes the day the year opens on. A year carried by Akatl begins on Zipaktli; a Tekpatl year begins on Mikiztli; a Kalli year begins on Ozomahtli; and a Tochtli year begins on Kozkakwawhtli. Those four opening signs sit five places apart on the twenty-sign wheel, exactly as the bearers do.

Only these four signs can open a year. $365 = 28 \times 13 + 1$, so each new year advances the day sign by five places and the number by one; five places along a twenty-sign wheel returns to the same four signs forever. A year is named by its bearer inside the reed-bundle frame shown above.

The fifty-two year bundle

Four year bearers $\times$ thirteen numbers = 52 distinct year names. After 52 years the 260-day count and the 365-day year return to the same pairing: $52 \times 365 = 18,980 \text{ days} = 73 \times 260$. That closing is the xiuhmolpilli, the binding of the years, marked by the drawing of new fire.



Quiz

1. How many veintenas are in the year, how long is each, and what do they total?

2. What are the nemontemi, and how are they treated?

3. Name the four year bearers in Nawatl.

4. Which day does an Akatl year begin on? A Tekpatl year?

5. Which day does a Kalli year begin on? A Tochtli year?

6. Why can only four day signs bear a year?

7. How many distinct year names exist before the sequence repeats?

8. Show why 260 and 365 realign after exactly 52 years.

9. Which veintena honors the dead with fire and the falling fruit?

10. Which veintena marks the descent and rebirth of the sun?

11. What is a xiuhmolpilli, and what ceremony marks it?

12. Did the Mexika calendar have a leap year? Explain how it worked.

13. About how long would a calendar with no leap correction take to drift 20 days against the solar year?



Answer key

1. Eighteen veintenas of twenty days each, totalling 360 days.
2. The days that close the year and belong to no veintena — days of rest and care, when nothing new is begun.
3. Tochtli, Akatl, Tekpatl, Kalli.
4. An Akatl year begins on Zipaktli; a Tekpatl year begins on Mikiztli.
5. A Kalli year begins on Ozomahtli; a Tochtli year begins on Kozkakwawhtli.
6. Because 365 divided by 20 leaves a remainder of 5, each year's opening sign advances five places on the twenty-sign wheel, so only every fifth sign is ever reached: the same four.
7. Fifty-two — four bearers times the numbers 1 through 13.
8. $52 \times 365 = 18,980$ days, and $18,980 \div 260 = 73$ exactly, so both counts complete whole cycles on the same day.
9. Xokotl Wetzi.
10. Panketzalitztli.
11. The binding of the years, the close of the 52-year cycle; it is marked by the New Fire ceremony, when fires are extinguished and one new fire is drawn and carried out.
12. Yes — Sahagún and Durán both documented it. Every four years the sun needs an extra day to return to its starting point on the horizon, so the last day of the nemontemi was repeated: extended across two days carrying the same tonalli.
13. Roughly 83 years — fast enough to make the calendar useless within a lifetime.

Study tip: write the eighteen veintenas around a circle with the nemontemi as a small gap, then mark today's position. Redraw it from memory each week.