River of Life Timeline: Draw Milestones with Symbols and Captions

Original tasks 1, 2, 3 / complete keys

Task 1

A river is 180 millimeters long with 6 milestones. Each symbol plus caption needs about 30 millimeters. Does the average spacing fit? Show the arithmetic.

Answer: Yes. 180 divided by 6 equals 30 millimeters per milestone, which equals the needed 30 millimeters. The average fits exactly, so check each area individually for crowding.

Reason: Average spacing is usable length divided by milestone count. Compare the average with the needed space. Equal values mean the plan is tight, so individual measurement is required.

Check: Measure each milestone area on the actual page and confirm it is at least 30 millimeters wide; if not, shorten a caption or move a marker.

Task 2

A learner has 5 milestones and a usable river length of 250 millimeters. They want at least 45 millimeters per milestone. Does the plan fit? Show the arithmetic.

Answer: Yes. 250 divided by 5 equals 50 millimeters per milestone, which is greater than 45 millimeters. The plan fits on average.

Reason: Divide usable length by milestone count to get average spacing. Compare with the minimum needed. Since 50 is greater than 45, the average plan fits.

Check: Measure each of the 5 areas and confirm none is under 45 millimeters; adjust if any area is crowded.

Task 3

A learner draws 7 milestones on a 210-millimeter river. Each symbol plus caption needs 35 millimeters. Does the average spacing fit? If not, what is one simple fix?

Answer: No. 210 divided by 7 equals 30 millimeters per milestone, which is less than 35 millimeters. One simple fix is to reduce the number of milestones to 6, because 210 divided by 6 equals 35 millimeters.

Reason: Average spacing is 30 millimeters, below the 35-millimeter need. Reducing the count to 6 raises the average to 35 millimeters, which meets the need exactly.

Check: Recalculate with the new count and measure each area on the page to confirm at least 35 millimeters per milestone.

River of Life Timeline: Draw Milestones with Symbols and Captions

Original tasks 4 / complete keys

Task 4

A learner plans 4 milestones on a 160-millimeter river and writes captions that need 50 millimeters each. Does the average spacing fit? Show the arithmetic and state one adjustment.

Answer: No. 160 divided by 4 equals 40 millimeters per milestone, which is less than 50 millimeters. One adjustment is to shorten captions so each needs 40 millimeters or less, or to lengthen the river if the paper allows.

Reason: Average spacing is 40 millimeters, below the 50-millimeter need. Shortening captions reduces the needed space; lengthening the river increases the available space.

Check: Measure each caption line after shortening and confirm each milestone area is at least the new needed width.

River of Life Timeline: Draw Milestones with Symbols and Captions

Source rubric / reflection

- [ ] River is continuous and winds from left to right, with milestones placed in chronological order.
- [ ] All four suggested milestones are present and labeled: birth, first day of school, a trip, and a goal.
- [ ] Two personal milestones are added and placed in chronological order.
- [ ] A symbol legend is present and matches every symbol used on the river.
- [ ] Each milestone has one small symbol drawn at its marker.
- [ ] Each symbol has a one-line caption that names the event and adds one detail.
- [ ] Captions do not overlap the river or each other, and letter height follows the baseline-to-midline convention.
- [ ] Valid alternatives are accepted: different symbol styles, different caption wording, and different handwriting styles are allowed if the legend and one-line rule are met.

Reflection: What did you check, what did you change, and what will you try next?