

Lesson **Polynomials: Math's Ultimate Superstars** for 9-10th

Polynomial Life Journal for juniors

In real life, many things **change with time**. Some change at a linear rate, some speed up, and some become more complex. In this journal, you will explain **your growing-up journey** using **polynomials where time is the variable(x)**. Your final output should help younger students understand how life changes as time passes.

How to Do It

Pick 2 changes in your growing-up journey which might follow linear, quadratic and cubic trends with time. Explain how these 2 things change. You can also show it using Table: Year vs Value, Graph

👉 Time = **x (years / months)** 👉 Growth = **linear, quadratic, or cubic polynomial**

Linear Growth ($y = ax$)

- Rule: The quantity increases by the same amount every year
- Choose 2 things that follow a linear pattern. Example : Height vs Time: You grow ~5 cm every year, Pocket Money? Books Read?

Quadratic Growth ($y = ax^2$)

- Rule: The quantity increases more every year
- Choose 2 things in life that follow a quadratic pattern. Example : Subjects Studied vs Time: More subjects added each year as you move to higher grades

Cubic Growth ($y = ax^3$)

- **Rule:** The quantity increases faster every year
- Choose 2 things that follow a cubic pattern. Example : Responsibilities vs Time: More chores at home, additional tasks at school

Upload: PDF or image of hand-written mini storybook or Diary-style journal
