HANDS DOWN EDUCATION · 6-WEEK UNIT STUDY PLANNER

Gardening & Plants unit study

A homeschool curriculum grown in the garden — botany, ecology, math and patience through growing food and plants, for K-12 learners.

GRADE BANDS K-2 · 3-5 · 6-8 · 9-12
FULL GUIDE https://handsdowneducation.com/homeschool/gardening

How to use this planner

The six weeks below are sequenced from the guide's sample week: five weeks that each take one core subject through the topic, then a showcase week that turns the portfolio into a final product. Run each activity at the level your child is at (the grade band notes tell you how), keep the output, and by week six you have a portfolio that shows the unit end to end.

Pace is yours. A week here is three to five working sessions; a topic that is going well can take two calendar weeks, and one that has run dry can be closed early. Tick the box when a week's output is in the portfolio.

Six-week scope and sequence

Wk	Focus	Key activity	Portfolio output	Done
1	**Reading & Writing through gardening & plants**	Read about the Irish potato famine as a lesson in monoculture, then write a planting plan for a garden designed to survive one crop failing.	Portfolio entry: the week's reading & writing piece, dated, with one line from your child on what they found out.	☐
2	**Math through gardening & plants**	Plan a bed to scale: calculate spacing for three crops, total plants that fit, and projected yield per square foot from seed-packet data.	Portfolio entry: the week's math piece, dated, with one line from your child on what they found out.	☐
3	**Science through gardening & plants**	Germinate the same seed in four conditions — light, dark, cold, no water — and document daily. The classic controlled experiment, with real stakes.	Portfolio entry: the week's science piece, dated, with one line from your child on what they found out.	☐
4	**Social Studies through gardening & plants**	Trace where three common garden vegetables originated and how they reached your continent — the Columbian Exchange told through dinner.	Portfolio entry: the week's social studies piece, dated, with one line from your child on what they found out.	☐
5	**Art through gardening & plants**	Keep a botanical illustration journal of one plant from seedling to harvest, drawn from life at weekly intervals.	Portfolio entry: the week's art piece, dated, with one line from your child on what they found out.	☐
6	**Showcase and review**	Choose one final product that pulls the unit together — a presentation, an exhibit, a field guide or a short documentary — and give the week to making it. Finish with a portfolio review: lay every week's output on the table and let your child narrate what changed in what they know about gardening & plants.	The final product plus a one-page unit summary in your child's words, filed with the portfolio.	☐

Running it at your child's level

K-2 learners plant, water, measure growth with a marked stick, and sort seeds — plus the sensory work of soil and harvest that no book replicates.

Teens can test soil chemistry, calculate a garden's actual economics against grocery prices, and study agricultural policy and food systems seriously.

A sample week, subject by subject

Reading & Writing

Read about the Irish potato famine as a lesson in monoculture, then write a planting plan for a garden designed to survive one crop failing.

Math

Plan a bed to scale: calculate spacing for three crops, total plants that fit, and projected yield per square foot from seed-packet data.

Science

Germinate the same seed in four conditions — light, dark, cold, no water — and document daily. The classic controlled experiment, with real stakes.

Social Studies

Trace where three common garden vegetables originated and how they reached your continent — the Columbian Exchange told through dinner.

Art

Keep a botanical illustration journal of one plant from seedling to harvest, drawn from life at weekly intervals.

Common questions

We have no yard — is this out?

Not at all. Windowsill herbs, a single container tomato, and sprouting jars cover most of the botany. Community garden plots are worth asking about locally.

What if everything dies?

Then you have a genuine failure analysis to run — the most scientifically useful outcome available. Diagnosing why is better curriculum than an effortless harvest.

How does gardening reach beyond science?

Through the economics of food, the history of agriculture and empire, the geography of climate zones, and the daily arithmetic of planning a bed.