Quick Start Guide for Parents

Your roadmap to confident, stress-free science education at home. Click for Academic Packet.

Where to Start?

□ Self-Paced: Science by <u>Grade</u>: full *lesson plans* for K-8th and High School Physics & Chemistry
 □ Self-Paced OR Live: Science by <u>Topic</u>: in-depth experiments expand on <u>teacher led-lessons</u>
 Check current <u>Live Classes Calendar</u> for <u>teaching schedules</u>, zoom links, replays, and handouts

How much science each week?

K-6 th : 1–2 lessons per week (30min each) + a hands-on project
Middle School: 2 lessons per week (30-60min each) + 1-2 hands-on projects
High School: 3-5 lessons per week (45-60 min each) + 1 full lab (Physics, Chemistry, Astronomy

How much do you want to be involved?

Hands-On Co-Explorer – Parent and student do the program together. Both watch the lesson and
experiment videos, do projects together, and parent guides discussions and experiment steps.
Student Navigator – Parent gathers materials and prints out handouts ahead of time, sets up
specific lessons for the week (using provided lesson plans or make your own). Student watches
lessons independently and starts work on their activities, and parent checks in to review
progress and guides discussion of concepts covered.
Independent Learner – Student decides area they will study, gathers materials (and finds
substitutes as needed), prints out handouts before class starts, watches lessons independently
(taking notes during lessons), and starts work on their activities following the lesson. Each week,
student keeps parent informed regarding their work completed, concepts they covered, and

what they'd like to work on next. Students spend time each week preparing for their next set of

lessons and asking both teachers and parents for guidance and support as needed.

How to track progress?

Self-Paced: Grade Level Assessment Packets & Lesson Plan Tracker
 Mark lessons complete after finishing on tracker
 Use quizzes & design challenges to check understanding
 Download lesson summaries/lab sheets for portfolios
Live Classes: Monthly Review Sessions (individually scheduled), both 20min & 60min
Student Portfolio: include educational goals, science lesson summaries (completed weekly
handouts), lab reports with photos, project documentation, self-evaluations, research projects
field trip notes, STEM challenges, and a year-end reflection.

What about supplies?

Self-paced: Shopping lists available by <u>Grade Level</u> and also by <u>Topic</u>
Live classes: Weekly handout includes supply list (materials re-used throughout the year)
Tip: Keep a 'Science Box' with common items* and a 'Tool Box' (scissors, tape, hot glue gun)

Many items can be substituted so you can use what you have on had or can easily obtain!

What if we get stuck?

Ask <u>Aurora</u> and <u>Brian</u> for help right away!
Post questions in Google classroom (and show us your best work)
Attend the live Open Lab sessions with the teacher (individually scheduled)

New Parents! First Month Success Plan

- 1. Pick a Starting Point (Grade Level or Topic or Live)
- 2. Prep for your first lesson!
 - a. Grade Level: Select grade, watch intro video and download Lesson Plans
 - b. Topic & Live Classes: Select study area and download material list & handouts
- Watch first science lesson video with your child (For Topics, use <u>live class recordings</u> for teacher lessons)
- 4. Start work on your activities and experiments!

FAQ - Parents Ask...

- Do lessons need to be in order? No, but recommended for new families. Start here!
- Can siblings share? Yes! Recommended approach is Live Classes or Topics when teaching multiple ages.
- Are live classes recorded? Yes, posted the same day in appropriate section.
- What if my child is above/below grade? Switch levels anytime. Contact us!

*Science Box Essentials

- Paper (white)
- Popsicle & craft sticks
- Rubber bands
- String or yarn
- Cardboard boxes
- Index cards
- Paper clips

- Clothespins
- Straws, skewers, toothpicks
- Balloons, marbles, bouncy balls
- Pipe cleaners, coins, clay or playdough
- Items from recycling (clean glass jars, plastic bottles, food containers, berry baskets, plastic dinnerware, foam blocks...)

Still Not Sure What to Focus On?

Click on your <u>child's grade level</u> for what your child needs to know and follow this quick guide to zero in on your child's science goals for the year.

1. My child loves science and wants more challenge.

- Encourage independent projects that connect to real-world problems.
- Explore topics beyond their current grade level (check *Topics* section).
- Sign up for **STEM challenges**, competitions, or advanced labs.
- Encourage them to teach back what they've learned to you or younger students.

2. My child is bored with science.

- Start with a "wow" experiment to grab attention (check *Live Class* recordings).
- Link lessons to **personal interests** (e.g., sports → physics of motion, art → color chemistry).
- Keep it **hands-on first**, then explain the theory.
- Add short-term challenges with clear goals and quick wins.

3. My child feels anxious, overwhelmed, or struggles.

- Drop down 1–2 grade levels to build confidence.
- Shorten lessons (15–20 min) and end on a success each time.
- Focus on 1 topic at a time—avoid bouncing between subjects too quickly.
- Praise effort, not just correct answers. ("I notice you kept trying different approaches until you found one that worked—that kind of persistence is what great scientists do!")

4. My child hasn't done much hands-on science.

- Pick simple experiments using household items (see Science Box Essentials).
- Pair each concept with a tactile activity.
- Build from quick, easy projects to more complex builds over the year.

5. My child is below grade level.

- Work at their **current skill level**, not their age level. (Important!)
- Use **self-paced videos** for targeted catch-up.
- Celebrate mastery of each concept before moving on.

6. I want my child to work more independently.

- Begin with short solo lesson viewing (5–10 min).
- Give checklists for progress tracking.
- Let them choose one project per month.
- Gradually add responsibility:
 - Self-assessments
 - Choosing project topics
 - Managing time and materials
 - Cleaning up lab space without reminders

Tip: Revisit this guide mid-year to see if goals have shifted!

How do I fit this into everything else we're doing?

Do you feel overwhelmed trying to balance multiple subjects?

Blend science into your existing schedule so it's not "one more thing"
Use the curriculum as the "spine" or as enrichment to enhance other studies
It's absolutely fine to do <i>less</i> of the program overall but go <i>deeper</i> into each lesson!

Pro-Tip: If you're joining the Live Classes, each week's handout is designed to help you connect the science topic to other subjects your child is studying—like math, reading, writing, history, and spelling—so you can make the most of your time together.

- o scaffolded notes (use during class for note-taking or as a quiz after class) with answer key
- o complete material list (don't worry about getting everything on the list, the materials you can easily get will determine the experiments you do)
- o list of 4-12 experiments to do following the weekly lesson (in order of complexity)
- vocabulary and spelling list
- o recommendations for book titles for further reading in the subject (every month)
- o recommendations for scientists who have contributed to this area of science (every month)

What's the best way to use this program so my kids love it?

How to keep science from feeling like drudgery...

If you want science to be your child's favorite subject, give them the freedom to explore topics that spark their curiosity. Pair the hands-on projects with the videos so they can see the "why" behind what they're doing. Remember—science isn't like other subjects. It's not about memorizing a bunch of facts; it's about learning how to think, ask great questions, and solve problems. Celebrate their curiosity and persistence, not just perfect results. Praise the effort, the creative ideas, and the problem-solving they show along the way.

Now is the best time to get started! Click here to start.