AHAVA HOME LEARNING ACADEMY

ADVANCED SCHOLARS

Student Workbook | All Ages and Subjects

15 advanced challenges across five subjects. Three skill routes per subject, open to ready learners ages 5-12 and beyond.

Student / initials: _____

Started on: _____

Parent / caregiver: _____

STUDENT INSTRUCTIONS

Choose a route by demonstrated skill, not by age. Read or listen to the full assignment. Work independently, explain your reasoning, then review with a caregiver. You may complete different routes in different subjects.

These are original introductory advanced challenges, not complete school-year courses or official Alabama test questions. Keep personal student records private.

SUBJECT 1 OF 5

MATHEMATICS

Mathematical reasoning, patterns, and algebra

01 Early Advanced

Using 12 counters, show three different equal-group arrangements and write a multiplication equation for each. Continue the pattern 3, 6, 12, 24, __, __ and explain the rule. Find a number that plus 7 equals 19. Explain why 6 is even but is not divisible by 4.

Show your thinking, drawing, evidence, or written response here:

02 Developing Advanced

A garden has eight rows of twelve plants. Three eighths are moved. How many remain? Show two methods. Solve 4x + 9 = 45. A map has a scale of 1 cm to 8 km. What distance does 6.5 cm represent? Explain the units.

Show your thinking, drawing, evidence, or written response here:

03 Extended Advanced

Solve 3(2x - 5) = 4x + 9, then check by substitution. Find the slope and equation of the line through (2, 7) and (6, 19). Give an nth-term formula for 5, 11, 17, 23, ... and check its fifth term.

Show your thinking, drawing, evidence, or written response here:

SUBJECT 2 OF 5

ENGLISH LANGUAGE ARTS

Evidence-based reading and writing

01 Early Advanced

Original story: 'Nora built a bridge from blocks. It fell when she added a toy. She changed the supports and tested again.' Identify the problem and the response. Write or dictate three sentences that distinguish what the story says from what you are guessing.

Show your thinking, drawing, evidence, or written response here:

02 Developing Advanced

Using the Nora story, explain why a second test does not prove that every bridge will work. Write an eight-sentence paragraph with two textual details, one inference, and one unsupported conclusion.

Show your thinking, drawing, evidence, or written response here:

03 Extended Advanced

Write 250 words comparing a fictional story with a scientific report. Use textual evidence from Nora's story, a counterargument, and a clear conclusion. Revise for precise word choice and logical organization.

Show your thinking, drawing, evidence, or written response here:

SUBJECT 3 OF 5

SCIENCE

Observation, experiment design, and evidence

01 Early Advanced

With an adult, watch two safe toy vehicles move on a flat surface. Draw what you observe. Ask one question about distance and name a condition to hold constant. Do not make up any measurements.

Show your thinking, drawing, evidence, or written response here:

02 Developing Advanced

Plan a safe comparison using the same toy vehicle on two different surfaces. Specify the measurement method and number of trials. With fictional practice distances of 40, 45, and 50 cm, calculate the mean and make a labeled graph. Mark the data as invented practice data.

Show your thinking, drawing, evidence, or written response here:

03 Extended Advanced

Design a controlled study of how surface type affects travel distance. Identify the independent variable, dependent variable, three controlled variables, two possible confounders, and sources of measurement uncertainty. Explain the limits of a causal conclusion.

Show your thinking, drawing, evidence, or written response here:

SUBJECT 4 OF 5

HISTORY AND SOCIAL STUDIES

Chronology, geography, and reliable sources

01 Early Advanced

Order four fictional family activities from first to last. On a verified map find Alabama and point north and south. With an adult, discuss how a memory differs from a dated document. Do not publish family records.

Show your thinking, drawing, evidence, or written response here:

02 Developing Advanced

Find Alabama's statehood date using a reliable historical source. Cite the source title and institution. Create a three-event timeline with real, verified dates. Explain why sequence alone does not prove cause.

Show your thinking, drawing, evidence, or written response here:

03 Extended Advanced

Research a documented Alabama historical event. Compare a primary source with an independent institutional analysis. Write 250 words about provenance, perspective, corroborated facts, and limitations. Cite genuine sources without inventing quotations.

Show your thinking, drawing, evidence, or written response here:

SUBJECT 5 OF 5

SCRIPTURE AND COVENANT STUDY

Close reading in context, with responsible application

01 Early Advanced

Read or listen to Proverbs 18:13 and the nearby verses. Explain why listening matters. Act out a fictional misunderstanding and ask one respectful clarifying question.

Show your thinking, drawing, evidence, or written response here:

02 Developing Advanced

Read Proverbs 18:13-17 and James 1:19-20 in their contexts. Identify the audience, a shared concern, and one difference. Write five sentences with accurate references.

Show your thinking, drawing, evidence, or written response here:

03 Extended Advanced

Compare Proverbs 18:13-17, Deuteronomy 19:15-19, and James 1:19-20. Identify genres and settings. Write 250 words making a responsible application without treating the three distinct texts as identical.

Show your thinking, drawing, evidence, or written response here:

PARENT REVIEW / MASTERY NOTES

Advanced is based on mastery, not age. Ask the student to explain their method and transfer the concept to a new task. A correct answer without understanding does not establish mastery. Keep these notes privately.

Mathematics

Route attempted: _____ Independent / Guided / Reteach: _____

English Language Arts

Route attempted: _____ Independent / Guided / Reteach: _____

Science

Route attempted: _____ Independent / Guided / Reteach: _____

History and Social Studies

Route attempted: _____ Independent / Guided / Reteach: _____

Scripture and Covenant Study

Route attempted: _____ Independent / Guided / Reteach: _____