Teaching elements: facilitator workshop outline

A practical 45-minute agenda with prompts, tasks and debrief. No live event is scheduled.

Purpose and setup

This is a ready-to-run facilitator outline, not a scheduled live event or a recording. Use it for an in-person or online department session. Aim: leave with one evidence-based element investigation and an assessment plan.

Prepare a shared display, the lesson template, rubric and worksheets. Participants can use the live tool or printed values. No account or physical sample is required.

0-5 minutes - Welcome and opening prompt

Display carbon. Ask: "What does each number tell us, and what does it not tell us?" Collect two misconceptions without scoring participants.

5-15 minutes - Demonstrate and critique

Model a source lookup, units and period/group navigation. Rotate the shell model and pause it. Ask which features are symbolic. Demonstrate reduced-motion and presentation options when relevant.

15-30 minutes - Small-group design

Give each group a learner level and an investigation: family sorting, property-use reasoning, trend exceptions or repeated decay trials. Have them adapt the 45-minute template and select evidence for assessment.

30-40 minutes - Peer review

Exchange plans. Use the rubric to find one strength and one missing piece of evidence. Ask each group to state an accessibility adaptation and a model limitation.

40-45 minutes - Close and follow-up

Each participant shares one revision and an exit ticket. Save the plan locally; do not collect student-identifying information in public notes. Suggested follow-up: teach the activity, collect anonymous examples and compare misconceptions at a later team meeting.

Facilitator prompts

What claim will learners make? Which evidence would change their mind? Are they confusing atomic mass with mass number? What does the model omit? How can a learner participate without color vision, animation, a mouse or

a personal device?

Suggested levels are starting points, not formal curriculum alignment. Use the site or printed data; no physical element samples are needed. Source data and limitations: elementexplore.com/sources.html. These original Element Explore materials may be copied and adapted for classroom use.