Start with a shadow. Leave with a lesson.

A free AI teaching kit from Nikhil Karkare, Walnut School.

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Put three opaque cards on a table — red, blue and yellow — cut to the same shape and size. Switch on a white torch and let one dark shadow fall on a white screen. Now ask the room a simple question: which card made it?

Watch what happens. People lean in. Someone says red, someone says it cannot be known, and the arguing starts. That is the moment you want. Hold it. Then ask what would change if you swapped only the colour of the card.

Here is the quiet truth of the setup: under white light, with everything else fixed, the shadow will not tell you the card's colour. A dark shape is a dark shape. You cannot reason your way to the answer — you have to test it.

I think that is exactly the right way to walk into a workshop about AI. Not with awe, and not with fear. With the habit of checking.

Most teachers I meet have used ChatGPT or Gemini to ask a question and read the reply. That is fine, but it is the smallest thing these tools can do. The real work is quieter: give the tool one trustworthy source, ask it for something you can actually teach, and then check its answer against the book the way you would check a bright student who is sometimes wrong. This kit shows you how, start to finish, using one real chapter.

One chapter, and real files to go with it

Everything here is built around NCERT Curiosity, Grade 7, Chapter 11: *Light: Shadows and Reflections* (Reprint 2026–27). We stay on shadow formation — the core is printed pages 158–159, with the position questions on page 166 — rather than trying to cover the whole chapter in one sitting.

Open the kit and you will find a 40-minute classroom plan, three original diagrams, six questions, a separate teacher key, and six classroom slides. Alongside them sit the exact prompts that made each piece, a short source brief, and a worked example of reviewing pupil answers. These are prepared examples, made and checked for this workshop — not screenshots pulled from a signed-in free account.

Get the official chapter straight from NCERT: https://ncert.nic.in/textbook/pdf/gecu111.pdf . We link to it rather than host it. The questions and diagrams are ours. NCERT has not endorsed this kit, and we would not claim it had.

Give each free tool one small job

The mistake is to ask one app to do everything. Give each a job it is good at, and check its work.

Notebook — to stay honest to the source. Upload the chapter, select only that source, and ask what is needed to observe a shadow. Then do the thing most people skip: open the citation and read the actual passage. Do not start web research. Turn off connected apps for the notebook where that control is shown, and leave saved AI notes unchecked as sources, so the tool cannot quietly cite its own earlier answer back to you.

Then set a small trap. Ask, "What is the price of my torch?" The chapter says nothing about it, so a well-behaved tool should tell you the information is missing — not invent a number. These controls help, but treat them as good habits, not a guarantee that outside knowledge is impossible.

ChatGPT — to draft the lesson. Put the source and a few short rules in a Project, or just attach them to a chat. Ask for a 40-minute plan built on the coloured-card hook, with a safe test, teacher questions and an exit check. Tell it to name the source first. If it hands you text instead of a file, copy the checked text into Google Docs yourself.

Gemini — to make a teaching image. Ask for a white torch, an opaque card and a white screen, with a dark shadow. Then check the order, the labels and the light path with your own eyes. Ask for one small change — swap only the card's colour — and compare the two pictures. That comparison is the lesson.

Claude — to turn checked content into a real file. Claude documents Word, PowerPoint, Excel and PDF creation on its free plan, within the usual limits. Hand it the content you have already checked and ask for one real download at a time. Then open the file — a filename sitting in a chat is not a document. You can upload a PPTX to Drive and open it in Google Slides without paying for any AI connection.

Every one of these has free limits, and sooner or later you will hit one mid-workshop. Keep the kit files open so a blocked button never stops the class. Cowork is a paid feature, and you do not need it here. No trial, no card.

Check the key before you judge the child

This is the part I care about most, so let me be plain about it.

A science review at Walnut once compared a set of slides, worksheets and an answer key. It caught a wrong heading on the key and wording that could blur sugar and flour dissolving in water. I am telling you this as a past example, not a claim that it has all been fixed or that every lesson gets this treatment.

The lesson stands on its own, though: a neat file can still be wrong. A tidy table and a confident tone are not the same as being correct. Check the meaning.

Take a real one from this chapter. "Transparent objects never make shadows" sounds right and is too strong — the chapter itself notes that some can cast faint shadows. If that sentence slips into an answer key, a child who wrote the better answer loses marks for it. A second AI nodding along is not proof; it is two confident guesses.

So build the check in. Ask one tool for questions and a key. Then open a fresh chat, give it the source and the questions but not the first key, and ask it to solve them cold. Where the two

disagree, you go back to the chapter and decide. That is you doing your job, with the tools helping — not the other way round.

Keep the work where you can find it again

Make one Drive folder for the chapter: Class 07 / Science / Ch11-Light. Inside it, keep Source, Prompts, Drafts, Checked, Classroom and Review in separate folders, and mirror the same pattern on your own computer. The kit includes a numbered template so you are not inventing it each time.

Name files so your future self understands them — something like C07-Sci-Ch11-Worksheet-v01-DRAFT.docx — and keep the teacher key well away from the pupil copy. One warning worth repeating: a folder name does not make a file private. Check Share before you share.

A few words that trip people up, in plain terms:

A **.md file** is just text with light formatting — a heading here, a list there. Open it in any text editor and copy the words. It is not an app, and it is not code you have to run.

Context is the source, rules and chat the AI can actually use for the task in front of it. A Drive link does not prove it has read your file. Ask it to name the file and show a short source line.

A **Project** is a space that holds related chats, files and rules together. ChatGPT and Claude both document Projects on their free plans, with limits. It is not the same thing as a Drive folder.

A **model** is the AI system doing the work inside the app. A model's name does not make its answer right, and on a free account the app may pick the model for you.

Read first. Mark later.

The answer-review example uses made-up pupil IDs and typed answers, run through real Tesseract OCR. It is a workflow to copy, not a test of handwriting.

The order that keeps you safe is always the same: image, then text, then your check, then suggested marks, then your approval, and only then a test Sheet. The kit's approvals are simulated, and one unclear answer is deliberately held with a blank mark — it never silently becomes a zero, and it never slips into the approved export. The example covers a single question, not a whole worksheet total.

Please do not upload real pupil work or parent mail into a public workshop. A Gmail connection is optional and must follow your school's policy. The guide also shows a made-up email and a plain copy-and-paste route that sends nothing at all.

Start with one useful result

You do not have to learn four apps today. Pick one thing — a source check, a lesson plan, or an image. Run the prompt, check the result, and save it in Drafts with a clear name. Keep the source and the recipe for next week.

The goal was never a longer, cleverer chat. It is one lesson you can explain, find again, check, and teach with a straight face.

That is what I want you to carry out of the room: not a trick, but a way of working you can repeat tomorrow.

Before publication

The kit, the workshop slides and the free-app guide all need a review before this page goes live, and the download link gets added only after that. Product help was checked on 3 November 2026; it was not tested on every free account, and features and school permissions do change. The plain-English target is a goal, not a measured Lexile score. The kit carries no real pupil data, no private school links, and no copy of the NCERT chapter.