

# Project question: a supplied-record plan

**Your goal:** Paper question planning only. Review the supplied fictional nonbiological documents. Do not collect data from people, run experiments, handle specimens or design a laboratory protocol. Today's objective: Define a testable claim and methods for your independent capstone project.

**One product:** Independent project definition: researchable question, testable claim, methods outline with identified variables and measurement units, a designated control, and one named limitation.

**Question:** How can a question, a counting rule and a comparison stay within the available records?

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## Start the work

Prior May 13 custody preparation is not assumed complete or approved. Use the complete new fictional planning set supplied here.

1. Paper question planning only. Review the supplied fictional nonbiological documents. Do not collect data from people, run experiments, handle specimens or design a laboratory protocol. Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending. Step: State a clear, researchable question for your project.
2. Paper question planning only. Review the supplied fictional nonbiological documents. Do not collect data from people, run experiments, handle specimens or design a laboratory protocol. Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending. Step: Write the claim you expect your project to support.
3. Paper question planning only. Review the supplied fictional nonbiological documents. Do not collect data from people, run experiments, handle specimens or design a laboratory protocol. Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending. Step: Outline the methods you will use to gather evidence.
4. Paper question planning only. Review the supplied fictional nonbiological documents. Do not collect data from people, run experiments, handle specimens or design a laboratory protocol. Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending. Step: Identify your key variables and how you will measure them.

5. Paper question planning only. Review the supplied fictional nonbiological documents. Do not collect data from people, run experiments, handle specimens or design a laboratory protocol. Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending. Step: Note one limitation of your proposed approach.

Paper question planning only. Review the supplied fictional nonbiological documents. Do not collect data from people, run experiments, handle specimens or design a laboratory protocol. If blocked, save one draft with missing input, next action and receipt pending. Portfolio audit and Final portfolio submit are distinct authentic obligations.

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## Words you will use

### **research question**

Specific question answerable using identified evidence and a stated rule.

### **expected claim**

Prospective prediction, not a report of an observed result.

### **hypothesis**

Proposed expectation that evidence could support or fail to support.

### **method outline**

Description of how the supplied records would be read and compared.

### **variable**

Recorded property that can differ among items.

### **independent variable**

Here, the requested field names an existing grouping, not a manipulated cause.

### **explanatory grouping**

Category used to organize a comparison.

### **dependent variable**

Here, the measured completeness outcome in each record.

### **outcome**

Property counted under the stated rule.

### **operational definition**

Exact rule used to recognize or measure a property.

### **recorded-field count**

Number of the four assessed fields with supplied values.

**unit**

What a reported number counts or measures.

**denominator**

Quantity used to divide in a ratio or mean.

**mean**

Sum of values divided by the number of included values.

**proportion**

Part divided by its stated whole.

**baseline**

Declared reference group for a comparison.

**control**

Here, a comparison baseline; it does not imply a randomized experiment.

**reference card**

Supplied known example used to check the coding rule; excluded from study groups.

**eligible record**

Card included by the declared selection rule.

**missing value**

Required source value not supplied.

**NOT RECORDED**

Explicit source label for missing information; preserve it.

**source record**

Identified document containing the original supplied values.

**coding**

Applying a defined category or number rule to a record.

**format**

Existing A/B group label in this fictional set.

**completeness**

Presence of the assessed fields, not proof their contents are true.

**causation**

Claim that one factor produced a change in another.

**confounding**

Other differences that prevent isolating a proposed cause.

**limitation**

Evidence boundary restricting the conclusion.

**approval**

Genuine authorization from the responsible teacher or reviewer.

**ethics review**

Required assessment of a real project's effects and responsibilities.

**privacy**

Appropriate protection of information about people.

**portfolio audit**

Authentic review of required work and evidence, not completed by this draft.

**receipt**

Evidence that work reached its confirmed destination.

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## **H1: A question needs an answer rule**

Paper question planning only. Review the supplied fictional nonbiological documents. Do not collect data from people, run experiments, handle specimens or design a laboratory protocol.

Opening input: fictional card MINI has title Guide, shelf A and language NOT RECORDED. These are its three assessed fields. Two have a recorded value and one says NOT RECORDED. A proposed question asks how many fields have recorded values. The rule counts a recorded value as 1 and NOT RECORDED as 0. Original route: name the measured quantity and unit in one short answer. This is a count of present fields, not a judgment about a person. Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending.

Today is Friday May 14. Prior May 13 custody work is not assumed complete. No prelab question is required to start this supplied route. Read H1 only now. Use the full planning cards in their intervals; the glossary and model are optional references.

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## **D1: Complete fictional document set**

Archive PLAN-14 is invented for this exercise. It has four pre-existing document cards, two labeled Format A and two Format B. Labels describe existing groups; nobody will assign formats, test people or collect new records. Names are fictional role codes, not student or patient identities. The cards below are the entire eligible set.

Dictionary: ID identifies a card. Format is A or B. The four assessed fields are collector, date, place and purpose. A field contains either the written value below or the exact missing label NOT RECORDED. Dates are invented year-month-day strings. No real event, institution, signature or approved procedure is represented.

A01 | Format A | collector H1 | date 2027-04-01 | place Desk P | purpose review. A02 | Format A | collector H2 | date 2027-04-01 | place Desk Q | purpose NOT RECORDED.

B01 | Format B | collector H3 | date 2027-04-02 | place NOT RECORDED | purpose NOT RECORDED.  
B02 | Format B | collector NOT RECORDED | date 2027-04-02 | place Desk R | purpose archive.

No other fields or cards are part of this set. A written value counts as present even though its truth has not been independently checked. NOT RECORDED stays missing; it is not none, zero events, a blank to invent or proof that no event occurred. These documents have different dates and contents as well as format labels.

At 5–20 use D1/Q1 to draft a question about recorded-field completeness across the two formats. Do not compute or report a finished group comparison today. The product is a plan using available records, not a new results table. Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending.

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## Q1: Refine one researchable question

A researchable question identifies what records are compared and what property will be read from them. Original scaffold: Among these four PLAN-14 cards, how does [measured completeness quantity] compare between [the two existing format groups]? Replace the brackets using D1/P1. Avoid better workers or causes because those claims need evidence not supplied.

Use this three-part check: the question names the four-card set; it names both formats; it names the mean-count outcome defined in P1. Keep the scope to these records. If a real teacher or peer responds, record the actual deidentified suggestion. Otherwise perform this same check and mark self review. Do not invent approval or peer advice. Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending.

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## P1: A bounded paper reading plan

At 20–40 write an expected claim, then a short method outline for reading existing cards. An expected claim is a prediction to evaluate, not an observation already made. State which group you expect to have the larger mean count, or predict equal means, and label it prospective. A later result might disagree. Do not invent a measured result to justify the expectation.

Operational rule: inspect collector, date, place and purpose only. Score a field 1 if D1 supplies a value, and 0 only if it says NOT RECORDED. Add the four scores for a card; the possible count is 0–4 recorded fields per card. Do not count ID or format as assessed fields. Do not infer missing values from nearby cards.

For a later comparison, each group has two eligible cards. Mean completeness count = total recorded-field counts for that group divided by 2 cards. Unit: recorded fields per card; keep an exact half-field value if it arises. This is an average count, not half a physical field. Use this mean-count route for the original draft to keep one outcome.

Your outline should name all four eligible IDs, the four-field scoring rule, how missing labels are retained, and the group-mean comparison. Describe only reading and coding these supplied cards; no physical setup, biological procedure or human participant is needed. No group result, graph or statistical-significance calculation is required today. Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending.

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## **V1: Variables, units and a declared comparison**

At 40–55 identify the variable roles in the same draft. In the requested independent-variable box, write existing document format, A or B; it is an explanatory grouping, not a manipulated treatment. In the dependent-variable box, write recorded-field count per card under P1. The planned group summary is its mean, in recorded fields per card.

Designate Format A as the comparison control or baseline. Here control means a declared reference group for describing a difference, not a randomized experimental control or proof of causation. Apply the same four-field rule to both groups. A full reference card below checks the coding rule; it is not an extra study item.

Coding reference REF: collector Z1; date 2027-03-01; place Reference Desk; purpose demonstration. It has four recorded fields, so the reference count is 4 of 4. REF is excluded from both group means. If a proposed method counts 5 by including the ID, revise the rule description before any analysis. No student must fill a second reference table. Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending.

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## **L1: One limitation and what it changes**

At 55–70 add one named limitation with its consequence. The set is small and invented, so a comparison cannot estimate all real documents. Different groups also have different dates and contents, so a group difference would not isolate a format effect. Recorded presence does not establish that a written value is true.

Choose one of those real limits and explain which claim it blocks. Do not merely write more data needed. Do not propose an experiment, collect real private records or invent an ethical clearance. The paper plan can be drafted while actual teacher topic acceptance and project approval remain pending.

Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending.

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## **F1: Check and save the same definition**

At 70–80 review the existing draft: researchable question, prospective expected claim, paper reading method, grouping/outcome units, Format A baseline and one explained limit. Restate the question, expectation and comparison group as its final three-line summary. This is the exit ticket within the same draft, not another assignment.

Check the record IDs, denominator 2, four-field rule and REF exclusion. Correct a real mismatch or mark a verified match. Use self review unless actual feedback occurred. No completed result, peer agreement or teacher approval is supplied by the model. Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending.

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## **S1: Project and portfolio obligations stay distinct**

Track eleven short statuses: 1 topic/teacher acceptance; 2 genuine records/privacy permission; 3 actual project methods and ethics approval; 4 real safety/materials/supervision if later relevant; 5 genuine rubric/feedback. Also track 6 enrolled official task/access/completion; 7 authentic Portfolio audit; 8 authentic Final portfolio submit; 9 confirmed destination/deadline; 10 saved definition; 11 actual receipt. Use completed, pending or not checked with a pointer or missing input. Start marks during work; update only changes.

The class schedule names Activity 8.1.1 Identifying a Project Topic. Confirm the genuine prompt and stopping point with your teacher. The two Class Records obligations, Portfolio audit and Final portfolio submit, have no verified fields, destination or receipt here. This fictional draft does not complete either one. Do not create a fake portfolio or audit.

Open the linked BI assignment and follow its posted directions. Opening the assignment is not a submission receipt. No next dated class is listed.

Save the same chosen-route draft. If blocked, retain missing input, next action and receipt pending. Actual student, patient or restricted case data are not needed for this preparation. No experiment or actual project is authorized by this paper plan. Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending.

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## M1: Distinct catalog-planning model

Optional distinct invented model, not another task. Two old library catalog cards have groups Red and Blue. Each has three assessed fields: title, shelf and language. R7: Red; title Guide; shelf K; language English. B8: Blue; title Atlas; shelf M; language NOT RECORDED. Reference card LREF: title Index; shelf Z; language English. All three fields are supplied; exclude LREF from the compared set. These are fictional document labels, not people.

Worked definition: Question: in these two cards, how does the recorded-field count compare between Red and Blue? Expected claim: I predict Red will have a larger count; this is the plan's expectation, not a claimed study result. Method: read only title/shelf/language; score recorded 1 and NOT RECORDED 0; sum per card and compare the two counts. Keep missing language unchanged.

Variables: existing group Red/Blue is the explanatory grouping, not a treatment; outcome is recorded fields per card, possible 0–3. Red is the declared comparison baseline. The full reference should score 3 and is excluded from the compared set. No further cards are added.

Limitation: one invented card per group cannot establish that a group label caused a difference. Final summary: compare these two cards' completeness; predict a larger Red count; use Red as baseline. Worked self-check: the method names all three fields and excludes the reference. No actual analysis, teacher approval or peer response is claimed. Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending.

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## Try the decision

Original route: the formats also have different dates and contents. What can the planned comparison claim? Actual route: use genuine design and evidence limits.

- Describe completeness in these supplied groups without inferring format caused it.
- Conclude that notebook format caused every missing field despite the differing dates and contents.
- Treat the expected comparison claim as a completed result before examining the supplied groups.

Explain your choice using the reading. Discuss it or say it to yourself. This practice does not add another submission.

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## Your 80-minute flow

|               |                                                                                                                                                                                                                                                                                                        |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0–5 minutes   | Use H1 for one quantity/unit answer. Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending.                                  |
| 5–20 minutes  | Use D1/Q1 to refine one supplied-record question. Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending.                     |
| 20–40 minutes | Use P1 for an expected claim and paper reading method. Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending.                |
| 40–55 minutes | Use V1 for grouping, outcome/units, baseline and reference exclusion. Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending. |
| 55–70 minutes | Use L1 for one explained limitation. Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending.                                  |
| 70–80 minutes | Use F1/S1 to summarize/check/save the same draft and update statuses. Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending. |

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## Your response record

Use these labels on paper or in your document. The space below also works when this page is printed.

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## One opening quantity

Original route: Use H1 to name the quantity/unit, or genuine assigned input.

Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending.

Use this space or the same labeled section in your existing document. Add paper when your table, graph or drawing needs more room.



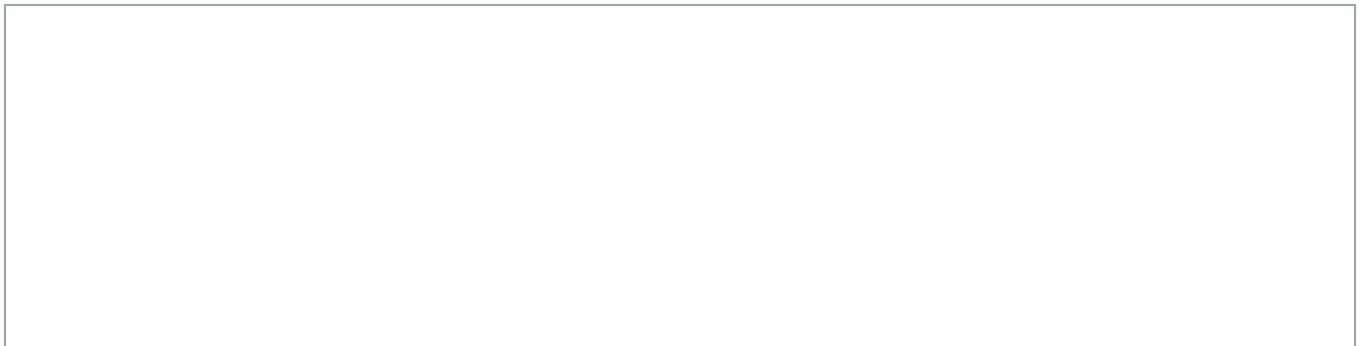
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## One researchable question

Original route: Use D1/Q1 for the four-card question and honest self/actual feedback.

Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending.

Use this space or the same labeled section in your existing document. Add paper when your table, graph or drawing needs more room.



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## Expected claim and paper method

Original route: Use P1 to write a prospective expectation and a reading plan, not results.

Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending.

Use this space or the same labeled section in your existing document. Add paper when your table, graph or drawing needs more room.



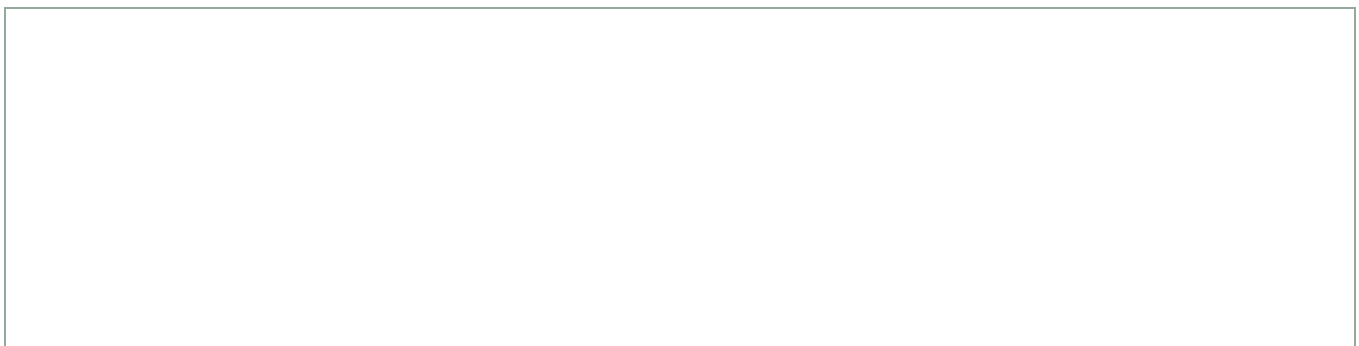
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## Variables, units and baseline

Original route: Use V1 for grouping, outcome/unit, baseline and excluded coding reference.

Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending.

Use this space or the same labeled section in your existing document. Add paper when your table, graph or drawing needs more room.



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## One explained limitation

Original route: Use L1 to state a supplied limitation and the claim it prevents.

Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending.

Use this space or the same labeled section in your existing document. Add paper when your table, graph or drawing needs more room.



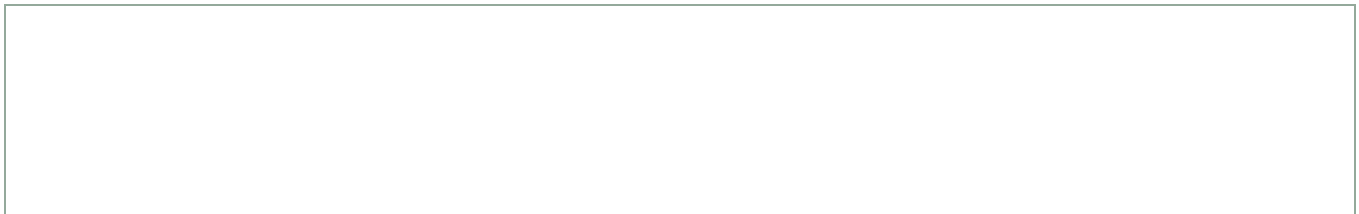
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## Same-draft summary and check

Original route: Use F1 for the final three-line summary within the same draft.

Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending.

Use this space or the same labeled section in your existing document. Add paper when your table, graph or drawing needs more room.



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## Save with authentic obligations pending

Original route: Use S1 to keep project approvals and both portfolio obligations separate.

Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending.

Use this space or the same labeled section in your existing document. Add paper when your table, graph or drawing needs more room.

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## Check your product

- Original route: one question identifies all four PLAN-14 cards, both format groups and the defined completeness outcome.
- Original route: expected claim is prospective; no completed group result is asserted.
- Original route: the method includes exactly four assessed fields, missing 0/present 1, all eligible IDs, group denominator 2 and REF exclusion.
- Original route: format is an existing grouping, outcome uses recorded fields per card and Format A is the declared comparison baseline.
- Original route: one limitation states which inference is blocked; final summary stays inside the same draft.
- Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending.
- Both routes: project approvals, official completion, portfolio audit/final submission, saved draft and receipt remain distinct.

**Keep the limit:** A record-completeness comparison describes the supplied documents. It cannot show why entries are missing, measure anyone's honesty or performance, or establish a causal effect of format.

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## Turn in your work

Open the linked BI assignment in Turn in your work. Confirm the actual rubric, destination and deadline. Actual route: teacher-approved topic, deidentified records, form and rubric replace original practice. Complete one project-definition draft only. Missing project approvals and authentic portfolio obligations remain pending.

Paper question planning only. Review the supplied fictional nonbiological documents. Do not collect data from people, run experiments, handle specimens or design a laboratory protocol. If blocked, save one draft with missing input, next action and receipt pending. Portfolio audit and Final portfolio submit are distinct authentic obligations.

[Open this assignment in Schoology.](#)

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## Carry forward

Define what you will count and compare before claiming what the records show.

No next dated lesson is listed. Confirm real project approval and portfolio obligations with the teacher. Which project or portfolio requirement still needs confirmation?

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## Sources and resources

[Open today's page](#)

### **NIST-DESIGN · What is experimental design?**

NIST/SEMATECH e-Handbook; used to distinguish manipulated factors from existing record groups

<https://www.itl.nist.gov/div898/handbook/pri/section1/pri11.htm>

### **NIST-MEAN · Measures of Location**

NIST/SEMATECH e-Handbook; arithmetic mean definition

<https://www.itl.nist.gov/div898/handbook/eda/section3/eda351.htm>