

Relative Clauses?

Relative clauses are dependent clauses that modify nouns. They function similarly to adjectives, adding descriptive information to the noun they modify. These clauses are introduced by relative pronouns such as "who," "which," "that," "whom," "whose," and "where." For example, in the sentence "The book that I read last night was thrilling," the relative clause "that I read last night" modifies the noun "book" by providing additional information about which specific book is being referred to.

Adding Detail

Relative clauses provide context and detail by expanding on a noun's characteristics or qualities.

Connecting Ideas

They create smooth transitions between sentences and ideas, streamlining the flow of information.

Enhancing Clarity

Relative clauses eliminate ambiguity by specifying the precise noun being discussed.

Types of Relative Clauses

- Relative clauses add extra information about a noun, using words like “who”, “which”, or “that”. They help join ideas without starting a new sentence.

- Defining relative clauses

Or

Restrictive

- Non-defining relative clauses

Or

• Non-Restrictive

Essential to the meaning of the sentence.

Limit the noun's scope.

Not set off by commas.

Provide additional information.

Not essential to understanding the sentence

Set off by commas.

Defining relative clauses

- These tell us which person/thing we mean (necessary information).
- People: who / that
 - The geologist **who works on basalts** is my supervisor.
- Things: which / that
 - The sample **that we collected yesterday** contains olivine.
- Possession: whose
 - The student **whose thin sections were lost** had to repeat the work.
- Places: where
 - The outcrop **where we measured the section** is near the village.
- Time: when
 - The period **when rifting started** is still debated.
- Defining clauses usually have no commas.

Non-defining relative clauses

- These add extra, non-essential information. Use commas; do not use “that”.
- People: who / whose
 - My supervisor, **who specializes in igneous petrology**, is from Algeria.
- Things: which
 - The Atlas Mountains, **which extend across North Africa**, formed in the Cenozoic.
- Places: where
 - Annaba, **where I teach geology**, is on the Mediterranean coast.

Relative pronouns: quick guide

- who – people (subject or object)
- which – things/animals
- that – people or things (only in defining clauses)
- whose – possession
- where – places
- when – time

Relative Pronoun Case: Subjective vs. Objective

Relative pronouns can be in the subjective or objective case, depending on their function within the relative clause. The subjective case is used for the subject of the clause, while the objective case is used for the object of the clause. For example, in "The woman who lives next door is a doctor," "who" is in the subjective case because it is the subject of the clause "who lives next door." In "The man whom I met at the party is a musician," "whom" is in the objective case because it is the object of the verb "met." The choice of case often depends on the structure of the sentence and the function of the relative pronoun within the clause.

1 Subjective Case

The pronoun acts as the subject of the clause.

2 Objective Case

The pronoun acts as the object of the clause.

3 Remember the Rules

Knowing the correct case ensures grammatical accuracy.

Examples:

- The fault **which crosses the basin** is still active.
- The student **who sent the report** forgot the figures.
- The microscope **that I bought last year** was expensive.
- The researcher **whose article we discussed** teaches in France.
- The city **where the conference will take place** is very old.

Shortening relative clauses

- Often we can omit the pronoun or use -ing / -ed forms.
- Omitting “who/which/that” when it is the object:
 - The method **(that) we used** is standard.
- Using -ing:
 - The team **working on fluid inclusions** is in the lab.
- Using -ed (passive meaning):
 - The samples **collected in the field** are in the fridge.

. Exercises

- **A. Choose the correct pronoun (who, which, that, where, whose, when)**
- The outcrop ___ we visited yesterday shows beautiful folds.
- The student ___ laptop crashed lost all her data.
- 2011 was the year ___ I started my PhD.
- The mineral ___ you identified as amphibole is actually pyroxene.
- This is the lab ___ we prepare thin sections.
- The professor ___ gave the lecture is from Italy.
- The paper ___ discusses the Atlasic event is on my desk.

- **Answer key**
- that / which
- whose
- when
- that / which
- where
- who
- that / which

- **Defining or non-defining? Add commas where needed**
- Decide if each sentence needs commas (non-defining) or not (defining).
- My colleague who works on metamorphic rocks is in Morocco now.
- The Rif belt which is part of the Alpine system is highly deformed.
- Our field assistant who speaks French and Arabic will guide us.
- The river which flows through the valley erodes the alluvium.

- **Suggested answers**
- Defining → no commas (you have several colleagues; this one is specified).
- Non-defining → “The Rif belt, which is part of the Alpine system, is highly deformed.”
- Defining or non-defining depending on context; usually defining, so no commas.
- Defining → usually no commas (which river? the one that flows through the valley).

- **Join the sentences with a relative clause**

- Example:

A geologist is giving a talk. She studies volcanic arcs.

→ The geologist **who studies volcanic arcs is giving a talk.**

- I read an article. It explains the Atlasic event in Algeria.
- This is the microscope. I use it for fluid inclusion work.
- The samples are on the table. We collected them in the Saharan Atlas.
- He showed a diagram. The diagram summarized the stress field.
- Constantine is a city. Many important conferences are held there.

- Model answers
- I read an article **that explains the Atlasic event in Algeria.**
- This is the microscope **that I use for fluid inclusion work.**
- The samples **that we collected in the Saharan Atlas** are on the table.
- He showed a diagram **which summarized the stress field.**
- Constantine is a city **where many important conferences are held.**

- **Reduce the relative clause**
- Rewrite each sentence using an -ing or -ed phrase where possible.
- The team who is working on granite petrogenesis will present tomorrow.
- The cores that were drilled last year are stored in Jijel.
- Researchers who study fluid inclusions often use microthermometry.