

TD 01: English tenses and timing indicators in scientific context:

1- Definition:

English tense timing indicators (signal words) specify when actions occur, they act as clues for choosing the correct verb form.

Table 01. English principal tenses and timing indicators in scientific context.

Tense	Past	Present	Future
Simple	<p>Past habit or completed action. (Yesterday last, ago, in the past...)</p> <p>Examples: 1- Our last experiment <u>demonstrated</u> that light intensity affected growth. 2- The bacteria <u>grew</u> quickly in the nutrient medium.</p>	<p>Habit, general truth (Today, always, every, usually...)</p> <p>Examples: 1- Water <u>boils</u> at 100°C. 2- DNA carries genetic information.</p>	<p>Action that hasn't taken place yet. (Next, in the future, tomorrow)</p> <p>Examples: 1- Pollution <u>will destroy</u> our planet. 2- Under heat, the solution <u>will change</u> color.</p>
Continuous	<p>Action in progress at a specific moment in the past. (While, when, during...)</p> <p>Examples: 1- The plant <u>was growing</u> slowly until the start of rainfall days. 2- Corona virus <u>was spreading</u> faster among citizens.</p>	<p>Action in progress in the present moment (Now, at the moment...)</p> <p>Examples: 1- Humanity <u>is facing</u> a 6th phase of extinction. 2- Climate change <u>is altering</u> the distribution of insects.</p>	<p>Action that will be in progress in a specific time of the future (At this time tomorrow)</p> <p>Examples: 1- The scientific event <u>will be happening</u> during the next summer. 2- By the end of winter, the birds <u>will be returning back</u> to their nests.</p>
Perfect	<p>Action completed before another past action (Before, after, by the time.....)</p> <p>Examples: 1- The lab technician <u>had prepared</u> all the materials before the students <u>arrived</u>. 2- The ants <u>had stored</u> reserves before the winter <u>started</u>.</p>	<p>Connecting past actions to the present (For, since, yet, already, just....)</p> <p>Examples: 1- Pollution levels <u>have increased</u> since the industrial revolution. 2- Researchers <u>have discovered</u> a new treatment for anemia.</p>	<p>Action that will be completed before a specific time in the future (By tomorrow, by the next week...)</p> <p>Examples: 1- By spring, the plant <u>will have bloomed</u>. 2- The bacteria <u>will have grown</u> by the next day.</p>
Perfect continuous	<p>Action started at a point in the past and continued to another point in past (For, since, all day, the whole, how long...)</p> <p>Examples: 1- scientists <u>had been warning</u> about environmental damage since the nuclear plant was set up. 2- The plants <u>had been producing</u> excess oxygen until the light source was removed</p>	<p>Action started in the past and is still continuing in the present (For, since, all day, lately...)</p> <p>Examples: 1- Researchers <u>have been analyzing</u> the samples for three weeks to identify the mutation 2- The brave <u>student has been studying</u> for her exams since early morning.</p>	<p>Actions that will start at a certain point in the future and continue for a while in the future. (For, since, by the time, how long...)</p> <p>Examples: 1- By the end of the project, the team <u>will have been tracking</u> the endangered species in that habitat. 2- Under mutation pressure, the virus <u>will have been evolving</u> for several years.</p>