



Opposition: Biological clock

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Problem 15. Invent Yourself: Biological clock

Examples of **timing processes** in living organisms are plants opening their flowers at particular times of the day or sleep-wake cycles in humans. Propose a problem **concerning rhythms and timing** in the species of your choice.

Flowers have their own rhythm and timings based on their own biological clock. Investigate what happens when this cycle is disrupted.

Theory



1. Had example plants
2. Explained this aspect of biological clock
3. Concluded the main parameters presented in the clock
4. Pointed the main reasons and stages of the process



1. Theory didn't affect every plant just examples
2. Visual data not connect to experiment or theory
3. Explained theory which is not relevant to the shown experiment
4. Didn't include common differences between organisms' rhythm
5. Didn't show environmental factors which affect internal factors

Experiment



1. Had a control flower
2. Varied enough parameters
3. Controlled some factors during the experiment
4. Used more than 1 organism



1. Temperature, humidity, aeration of the air, aeration of the soil, other environmental factors
2. Didn't specify the difference in parameters for inside plants
3. 4 experiments, only 3 hypothesis
4. This light bulb, doesn't simulate the light from the sun (plants need red light for photosynthesis)
5. Didn't show any quantitative measurements or experimental data (apart from visual)
6. They were not all conducted simultaneously

Questions:

1. What data do you actually have on this experiment?
2. Which factors did you not control?

Questions:

**Thank you for
your attention!**