



# Topic 5 : Disinfectants

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International Young Naturalists' Tournament



# Task



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Prepare sterile culture dishes and investigate the **growth of door handle bacteria** and other common microorganisms. Investigate how **various disinfectants**, such as antibacterial soap, **affect the bacteria**

# Theory



## Strengths

Clear relevant theory

Theory links to hypotheses

## Weaknesses

(gender differences in handles not explained why)

# Experiment



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## Strengths

Research questions are clear

## Weaknesses

Unclear independent and dependent variables

Controlled variables not mentioned

# Results



## Strengths

Collected at stages of highest bacterial activity

Qualitative data included (images of the petri dishes)

## Weaknesses

Error bars are not present

Pictures not labelled - captions

No particular quantitative data analysis on the effect of the particular bacteria

# Conclusion



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## Strengths

Conclusions linked to Hypotheses

## Weaknesses

Hypothesis was not referred to the results

# Suggestions/Improvements



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- Add visual aids/pictures with label in theory
- More trials
- Include more variables
- Identify one exact particular bacteria and find how each disinfectant affects it