



Targeted Teaching Topic

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Summary of Topic:

Testing for microorganisms in the school using a petri dish and agar.

Main Curriculum Tie:

Microorganism growth.

Required Materials for Lesson:

- Sterile petri dish with agar.
- Incubator.
- Wax marker.
- Sterile swab.
- Squirt bottle.
- Distilled water.

Background for Teacher:

Present information on bacterial colonization and fungal growth.

Student Prior Knowledge:

Sterile technique for microorganism culture. Sites where bacterial and fungal growth occurs.

Intended Learning Outcome:

Students will determine if a particular site contains bacteria/ fungi.

Instructional Procedure:

- Wet a sterile swab with distilled water from a squirt bottle.
- Swab a suspected site where microorganisms may be present.
- Gently swab the surface of the agar with a back and forth motion being careful not to break the agar.
- Mark your dish lid with a wax marker.
- Store upside down in an incubator for 3 days at 25° C.
- Sketch your colonies and report your conclusions.

How to Measure Outcome:

Students should determine the amount of fungal/ bacterial activity for a specific surface.