Outline of the « Find the solution! » LES

NOTE This activity was designed within the framework of training sessions. It may require adaptation before being used with students.

PREPARATION



1 Catalyst

- Context
- Videos regarding:
 - . Propagation of micro organisms
 - . Reproduction of micro organisms
 - . Hand washing
 - . Solution dispensers



Activation of previous knowledge

- Construction of two networks of concepts: one dealing with simple machines and the effects of a force; the other dealing with mixtures
- Plenary review session

REALISATION AND INTEGRATION



3 Learning activities

- Properties of solutions (preparation of a solution from a solute)
- Biotechnology (pasteurisation and cellular culture)
- Materials (mechanical properties of a non ferrous alloy, nitinol)
- Electrical engineering (supply, conduction and control)



4 Establishing a plan

- The student outlines the problem
- The teacher benchmarks the questioning and specifies the evaluation criteria
- (See student booklet)



5 Complex tasks

- Preparing an antiseptic solution
- Designing an antiseptic solution dispenser, which works without contact with the hands and is electrically controlled



6 Synthesis activity

- Construction of a new network of concepts dealing with solutions
- Reflection on safe behaviours to adopt regarding the propagation of illness