TECHNOLOGICAL DESIGN PROCESS
IN SECONDARY SCHOOL

Identifying and outlining the problem

- Need to be fulfilled
- Object to be improved

Suggest a solution

- Initial ideas
  - I explain in my own words what I know about the need to be fulfilled or the object to be improved (constraints and operation).
- Solutions trail
  - I imagine my prototype… (words or sketch).
  - I imagine the operating principle (words or sketch).

Plan and produce a prototype

Materials

- I familiarise myself with the available materials, equipment and tools.

Development

- I choose what will prove useful to me to produce my prototype.
- What is my action plan?
  - What are the main parts to be made?
  - In what order will the parts be assembled?
  - What are the appropriate techniques?
  - What precautions do I need to take?
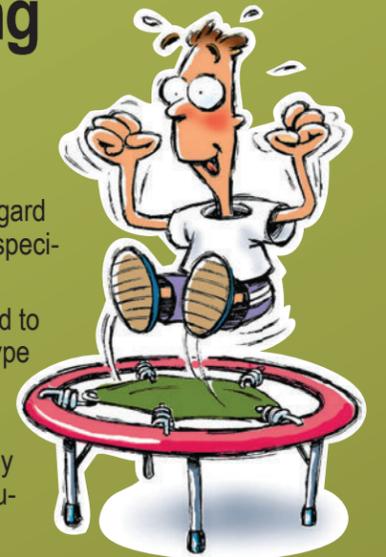 - What should I note and when?

Action

- I produce the prototype according to the established plan.
- I adjust the plan as needed and note the adjustments.
- I perform tests to check the prototype with regard to the established specifications booklet.

Working out explanations and concluding

- I evaluate my prototype with regard to all the characteristics in the specifications booklet.
- I suggest a solution for the need to be fulfilled based on my prototype and on my knowledge.
- What should I communicate about the proposed solution (my prototype) and how do I communicate it effectively?
- Did I use the appropriate terms and respect the rules and conventions to express my ideas?
- What do I take away from this process?