**DEFINING THE QUESTION**
The first step of the problem-solving process; it is vital that students can independently start to understand a problem and know how to proceed.

**ABSTRACTING TO COMPUTABLE FORM**
Changing the defined question into an abstract form—we have specific outcomes dedicated to this step, independent of the context of the problem and of the mathematical concepts being used.

**CONCEPTS**
Separating the abstraction step into three dimensions clarifies the outcomes being addressed, their ordering and their different use cases.

**TOOLS**
This dimension is still within the abstract step, so the outcomes here are focused on the choice of tool rather than the application.

**MANAGING COMPUTATIONS**
Step 3 of the problem-solving process is vital to ensure that students learn how to drive the computation and deal with difficulties that arise.

**INTERPRETING**
Step 4’s outcomes crucially bring the learner back to the original problem.

**CONFIDENCE TO TACKLE NEW PROBLEMS**
This addresses the need to reflect the student’s ability to undertake new and unfamiliar challenges and apply a problem-solving process.

**INSTINCTIVE FEEL FOR COMPUTATIONAL THINKING**
A crucial skill for students is to be able to spot poorly constructed arguments or misconceptions before proceeding to make an expensive mistake.

**CRITIQUING AND VERIFYING**
Both during and after the problem-solving process, critiquing and verifying are outcomes that are rarely touched upon in a student’s current educational experience. These outcomes demonstrate an awareness of limitations and enable the student to build trust in their ability to solve problems.

**GENERALISING A MODEL/THEORY/APPROACH**
Being able to adapt one solution to different applications is a desirable skill to encourage in students.

**COMMUNICATING AND COLLABORATING**
Throughout the process, the ability to communicate accurately and in the correct form for the purpose, is a vital skill that needs to be in all curricular.