# Computational thinking

**Computational thinking** involves breaking down problems into parts; defining abstract concepts; designing and using algorithms, patterns, models, simulations and experiments; and generalising patterns, relationships and solutions

### Decomposition
*Break problems into parts*

### Abstraction
*Remove unnecessary detail and focus on important aspects of structure or data*

### Pattern recognition
*Analyse the data or relationships and look for patterns to make sense of the data or problem*

### Models, experiments and simulations
*Create and apply models or simulations that represent situations or conduct experiments*

### Generalisation
*Recognise and explain patterns in solutions and extend to new situations*

### Algorithms
*Create a series of ordered steps that solve a class of problem*