

Mathematical Modelling

Drag the correct word(s) to complete the following sentences correctly.

traffic flow systems

equations

decisions

real-world

problems

understanding

graph

mathematical

- A mathematical model describes a _____ scenario using _____ language.
- It can be used to solve _____, increase _____ or to make _____.
- Mathematical models can be a set of _____, a diagram or a _____.
- One example of a mathematical models in use is _____.

Drag the correct word(s) to complete the mathematical modelling process below.

formulation

in agreement

model

real-world data

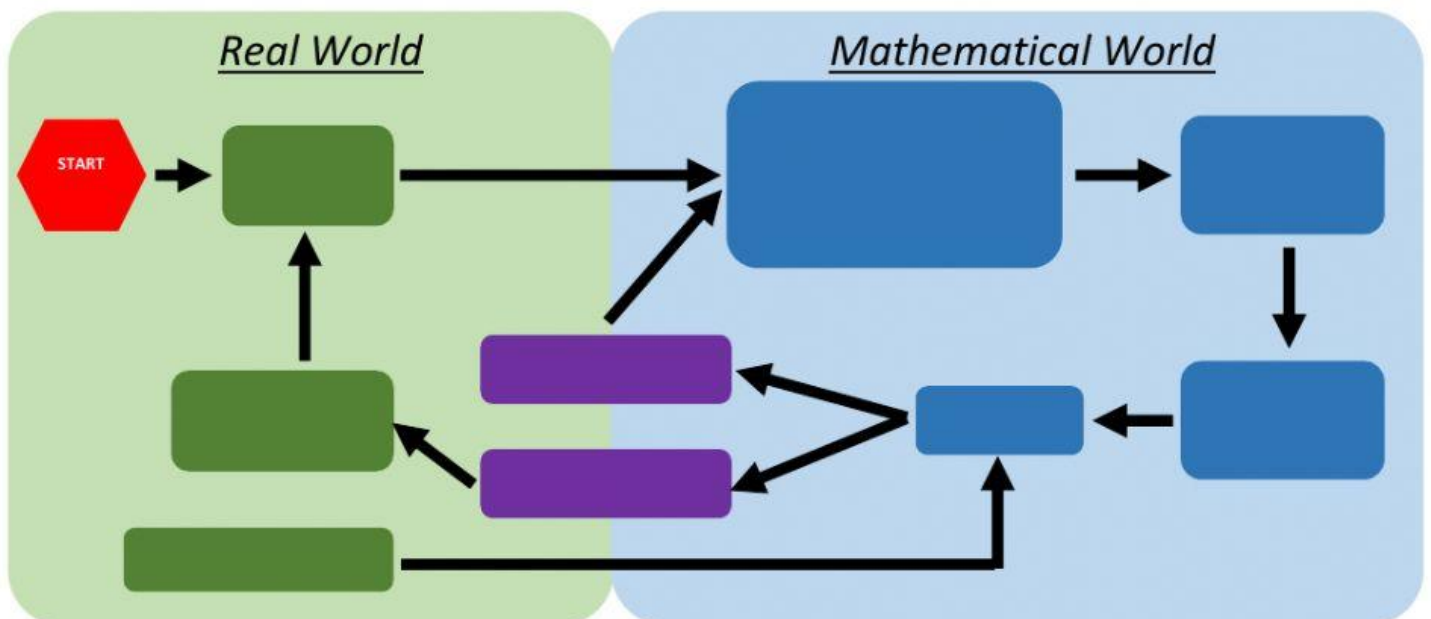
inform

solution

evaluation

real-world problem

not in agreement



Solve the following problem using mathematical modelling.

A school is preparing a trip for 400 students. The company who is providing the transportation has 10 buses of 50 seats each and 8 buses of 40 seats, but only 9 drivers available. The rental cost for a large bus is 800 and 600 for the small bus. Calculate how many buses of each type should be used for the trip for the least possible cost.

The school should rent _____ **large buses** and _____ **small buses**.