

### Key Learning

- To consider what simulations are.
- To explore a simulation.
- To analyse and evaluate a simulation.

### Key Vocabulary

#### Simulation

A computer simulation is a program that models a real-life situation. They let you try things out that would be too difficult or dangerous to do in real life.

### Key Resources



### Previous learning

#### Coding

Algorithms • Collision detection - simulating air traffic control • Object types • Debugging  
Flowcharts • Timers and sequence- simulation of lightning strike • Code, test, debug process

### Sticky knowledge

- A program that models a real-life situation. They let you try things out that would be too difficult or dangerous to do in real life.
- Some simulations represent dangerous situations for training such as flying in space, carrying out medical operations or piloting an aeroplane. Others simulate activities for fun, such as racing simulations.
- Simulations are often too simple; and unexpected problems can still occur in real life that are difficult to simulate.
- Simulations can also be very expensive.

### Characteristics needed for this topic:

- Resilience
- Perseverance
- Concentration

### Aspirations

- App designer
- Programmer
- Aviator
- Health care