

Sample Unit: *Fitness App*

In the “Fitness App” unit, students are required to model the relationships between different exercises and fitness for an application that can help astronauts stay healthy whilst at low gravity.

Cognitive sub-scale	Modelling
Cognitive process	Conduct experiments; analyse data

Fitness App

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Task Solutions Submit ➕

It's time to complete the model for the AstroFit application!

- Conduct **experiments** to investigate how **weightlifting and aerobics impact an astronaut's fitness**.
- Investigate if the relationships depend on **hydrating** (amount of water drunk).
- Choose the **graphs** that match your results and select the **experiments** that show how each activity impacts fitness.

Experiment lab

+ Add plan

Plan	Weightlifting (hours per week)	Aerobics (hours per week)	Hydrating (litres per day)	Fitness (points)
1	Amount ▼	Amount ▼	Amount ▼	

Model workspace

```
graph LR; W[Weightlifting] --> SG1[Select graph]; A[Aerobics] --> SG2[Select graph]; SG1 --> F[Fitness]; SG2 --> F; W --> CMW1[Check my work]; A --> CMW2[Check my work]; CMW1 --> F; CMW2 --> F;
```