

Fire detection with the Internet of Things

MATHEMATICS STUDENT BOOKLET



Why do we install fire detectors? Do you know where they are in your school or home? How do fire detectors work?

How could the Internet of Things – and the connectivity it brings – be used in fire detection?

Types of cameras

You were asked to protect a company's headquarters from fire using three different camera types. Which camera did you think was best value for money? Which was least effective? How did you decide on where to place each of the cameras?

Fire detector placement challenge:

Did you consider more than one way of placing the cameras? How did your team decide where to place each camera?

Presentation notes

What role will each of the people in your group perform? How will you address the main points included in your proposal? Things to consider include:

- How much area does your proposal cover?
- Breakdown of costs - how much will you charge for your proposal?
- How many of each camera did you use- and why?
- Could you suggest multiple options for the company to choose from?
- Do you have a company name, logo and slogan?
- Have you included ideas for how the Internet of Things can be used to connect the system?
- Who is going to be told if there is a fire and how are they going to be alerted?