



Capacity

Most incubators are advertised with their capacity in litres. When choosing your new incubator, it's important to consider the internal, as well as external dimensions. Your external dimensions will determine the footprint of the product, and whether it will fit into the space you have available in the preroom – or classroom. The internal dimensions will determine how many samples can be inside the incubator at any one time – consider your maximum class size, and how many petri dishes might require incubation.

Safety Features

Like any other heated equipment within your department, it is important to choose a product which features a thermal cut out to reduce risk of fire if something malfunctions. Oven incubators should also have sufficient insulation to prevent burns, or heating of any external surfaces – which could be dangerous.

You should also consider features which ensure the safety of your samples. Higher quality incubators will often feature an over temperature alarm, alerting you if the incubator has become too hot and your samples are at risk of being damaged.

Temperature

When choosing an incubator, you must not only consider the temperature range, but also the uniformity and system controls and outputs.

Keep in mind that it is not recommended to incubate any microorganism above 25°C in a school setting – meaning any standard incubator with an ambient +5°C to 60°C range should be suitable. This is to avoid growth of pathogens, which children could then be exposed to.

Higher quality incubators offer precise digital controls, and will have greater temperature uniformity, ensuring samples are always kept at a consistent temperature.

Additional Features

- Shelving**
Some incubators have adjustable shelving, making it easier to organise samples – possibly separating class sets onto separate shelves.
- Energy efficiency**
Models with greater insulation, or other features may help the incubator to consume less energy with prolonged use.
- Data logging**
Higher end incubators may have the addition of a data logging feature – this allows users to check the temperature uniformity over time. This is particularly important in research environments, such as for cell culturing.