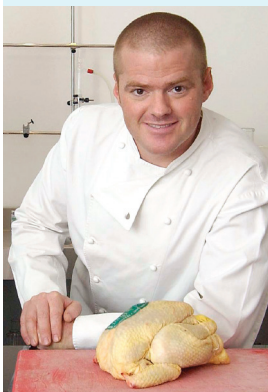


## States of matter

### What is a food scientist?

A food scientist designs and makes new food products. Food scientists change the state of foods by melting, freezing or baking. They work in lots of different workplaces, including:

- ▶ restaurants or kitchens
- ▶ universities
- ▶ government organisations
- ▶ specialist research associations.



*Heston Blumenthal is a food scientist. He uses kitchen chemistry to cook food in new ways.*

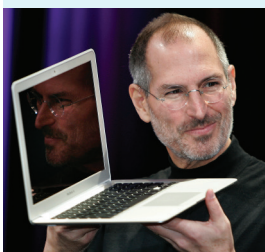
#### Key Learning and Science Skills:

- ▶ Be creative when designing, making and testing new foods.
- ▶ Set up practical enquiries when designing and making foods.
- ▶ Tell customers what you find out.

### What is a nanotechnologist?

A nanotechnologist finds ways to make materials at a very small scale. This is important for lots of jobs, such as:

- ▶ holography and optics technicians
- ▶ manufacturing engineers
- ▶ market development managers
- ▶ mechanical engineers
- ▶ optical engineers.



*This is Steve Jobs. He used nanotechnology when he developed computer graphics.*

#### Key Learning and Science Skills:

- ▶ Find ways to make materials at a very small scale.
- ▶ Measure using a range of scientific equipment.

### What is a medicinal chemist?

Medicinal chemists mix chemicals in different states, such as gas, liquids and solids, to make medicines that treat illness and disease. Medicinal chemists work in different places, including:

- ▶ laboratories
- ▶ pharmacies
- ▶ hospitals.



*This is Gunda Georg. She is a medicinal chemist at the University of Minnesota, US.*

#### Key Learning and Science Skills:

- ▶ Setting up investigations to find medicines that will treat illness or disease.
- ▶ Observe carefully to investigate how the chemicals might treat illness or disease.

*Would you like to use your learning about states of matter when you are older?*