

## Minimising

### Tasks

- Pick out the key information
  - Remember to use key words
- Condense as much as possible
  - Can you save space by replacing words with symbols or using a diagram?
  - What about arranging information into bullet points or into a table?

### Example

**Malaria** is spread by mosquitos which carry the Plasmodium protist. These are often found in areas with higher temperatures like Africa, Asia, and South and Central America, but not the UK. Mosquitos suck blood containing the protists from an infected person. They pass the protist, to other people they suck blood from. The mosquitos do not become ill and are called '**vectors**' because they transmit the disease. The symptoms of malaria include a fever, sweats and chills, headaches, vomiting and **diarrhoea**. Of the 200 million people infected each year, up to half die from this disease. There is no **vaccination** for malaria. Infection can only be prevented by stopping individuals from being bitten. People sleep under mosquito nets and wear insect repellent to avoid bites. **Antimalarial drugs** are also taken, which treat the symptoms and can prevent infection.

**Measles** is a very infectious viral disease that is often caught by young children. It is transmitted through the air in tiny droplets after an infected person sneezes. It causes a fever and skin rash. Many children in developed countries are given **vaccines** against measles, but sadly this is not the case throughout the world. Infection can cause more serious effects like infertility in adults who did not catch the disease as children.

### Example 1:

<u>Malaria</u> Pathogen – protist Transmission – vector - mosquitos Symptoms – fever, vomiting, diarrhoea Prevention – mosquito nets & anti malaria drugs	<u>Measles</u> Pathogen – virus Transmission – droplets Symptoms – fever/rash Prevention - vaccination
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### Example 2:

Name	Pathogen	Transmission	Symptoms	Prevention
Measles	Virus	Droplets	Fever Rash	Vaccination
Malaria	Protist	Vector - mosquitos	Fever Vomiting/diarrhoea	Mosquito nets / Anti-malaria drugs

### Your turn

The particle model is a scientific theory which explains the properties of solids, liquids and gases by looking at how the particles behave in each state.

The particles in a solid are close together in a regular pattern with a high density. The particles vibrate around a fixed position and cannot move around because there are strong attractive forces holding them together. This is the reason they have a fixed shape and a fixed volume. The particles have a low kinetic energy.

In a liquid, the particles are close together in a random arrangement and are able to move around freely. The density of a liquid is a little less than a solid but the particles have more kinetic energy. Liquids have a fixed volume but do not have a fixed shape, which is why they can be poured.

In a gas, the particles move randomly. They are far apart because there are no attractive forces holding them together, this is the reason they have no fixed volume and will fill their container. The particles in a gas have a high kinetic energy and a low density.

Solids can melt into liquids when they are heated and their particles gain energy. The attractive forces become weaker allowing the particles to move around freely. If the liquid continues to be heated then it can evaporate into a gas by removing all of the attractive forces and giving the particles lots more kinetic energy.