

Drug education

Year 5-6, Lesson 1: Medicines









Medicines

This is the first of four drug education lessons, for year 5-6. This lesson focuses on using medicines correctly and safely, and how they contribute to people's health and wellbeing, both every day and in emergency situations. Pupils also develop their knowledge and understanding of how vaccinations and immunisation can work to stop disease spreading and protect people from infection.

Classroom-ready PowerPoint versions of the lesson plans are available to <u>members</u> of the PSHE Association.

Learning objective

To learn how the correct use of medicines, and vaccinations, can help to maintain health and wellbeing.

Learning outcomes

Pupils will be able to:

- describe how medicines, when used responsibly, can support health and wellbeing
- explain how preventative medicines such as vaccinations can stop disease from spreading
- explain the safe use of medicines to help manage illness and allergies
- identify where to find further advice and guidance about the correct use of medicines

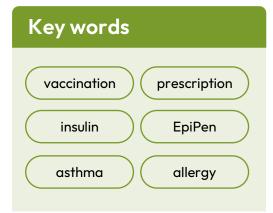
Climate for learning

Make sure you have read the accompanying teacher guidance notes before teaching this lesson. These include relevant subject knowledge for this topic, guidance on creating a safe learning environment, and curriculum links.

It is important to consider sensitivities and prior knowledge about specific pupils' circumstances. Pupils in the class will have a range of experience and understanding of the use of medicines, and some may be experiencing or have family members with health conditions. If any safeguarding issues arise during this lesson, these should be reported to the Designated Safeguarding Lead.

Resources required

- Box or envelope for questions
- Large pieces of paper and marker pens for group work
- Resource 1: Thinking bubbles
 [Pupils write in their books or complete the sheet one copy per pupil]
- Resource 2: Vaccination cards
 [one sheet per group]
- Resource 3: *Case studies* [one set per group]



Baseline assessment

Baseline assessment activity (Slides 10-11, 10 mins)

Remind pupils of ground rules, pointing out any especially useful to remember for this lesson, such as not putting people on the spot by asking them personal questions about medication they use.

In their exercise books or using **Resource 1: Thinking bubbles**, ask pupils to write what they know already about what can be done to manage illness, allergies or infectious diseases, by writing their ideas around these words.

Do not prompt the pupils or give examples. Reassure them that if they don't have much to add to their sheets at the moment, it doesn't matter, as they will be learning about this in the lesson and this activity is to find out what they already know and think. They should ensure their ideas are their own and not work with others. Circulate the room as the pupils complete this to gauge their starting point.

Introduction (Slides 12-13, 5 mins)

Introduce the learning objective and outcomes and explain that the use of a medicine depends on the type of disease or illness someone has. Medicines can:

- help someone feel better and relieve pain, such as from a headache
- help the body recover from illness
- help someone manage an ongoing health condition, such as asthma or diabetes
- prevent someone from becoming ill or stop a disease from spreading.

Core activities

Vaccination card game (Slides 14-18, 15 mins)

Explain that to keep some diseases caused by viruses (for example, measles and flu) under control, people can be given a vaccine so that they become immune to it, even if others around them have the virus. To successfully stop a virus from spreading, nearly all people in the population need to have the vaccine. To demonstrate this, play the card game using **Resource 2: Vaccination cards**.

Give small groups, of up to six pupils, cards from either scenario 1, 2 or 3 (aim to ensure an even spread across the class). Let pupils know that the cards represent a population (the number of people in a particular area).

Ask pupils to place all the cards face down on the table except for the card with the red dot. Explain that the card with the red dot represents a virus and the other cards which are face down represent people that the virus is going to come into contact with. One person takes the card with the red dot and puts it next to another face-down card. They then turn over the face-down card:

- If it has a V on it, that person is vaccinated against the virus, so will not catch it. The V card can be put to one side.
- If the card that is turned over has a circle on it, that person is not vaccinated so catches the virus.

 The pupil colours in the circle in red to make a second virus card.

Now each of the virus cards is matched to one of the remaining face-down cards and repeat the process – as before, if the card has a V on it, put it to one side, if it has a circle, colour it red so it becomes another virus card to be paired with one of the remaining face-down cards. Continue matching the virus cards with face-down cards until all the cards have been turned over.

Once all the cards have been turned over, ask pupils to share the outcome of their games. How many people are now infected and how many were vaccinated? Do they think their population is protected from the virus? (scenario 1: 10% vaccinated, scenario 2: 50% vaccinated, scenario 3: 95% vaccinated). The group(s) which had scenario 3 will find that they have only coloured in one additional card and all the rest were vaccinated. So even when they had two virus cards, neither of these could infect anyone else as everyone else was vaccinated and protected from the virus.

Explain that about 95% of the population would need to be vaccinated to stop a virus from spreading and so scenario 3 (19 vaccinated cards) would be the population most protected from the disease.

Explain that vaccinations for lots of diseases are available from a doctor or nurse. Most are given to babies or children so that they develop immunity early on and some to older adults, or those who are more at risk, who may need extra protection from diseases like flu. In some cases, a vaccinated person may still be affected by an illness they have been vaccinated against, but the vaccine can lessen the severity of the illness. Vaccine boosters may also be required. Generally, when a new virus occurs, it can take some time for scientists to create and test a vaccine that they know is safe and will protect people.

(**Note:** The threshold proportion for the number of people who need to be vaccinated to prevent a disease spreading depends on how contagious a virus is. This is an illustrative example for measles which is highly contagious, meaning a higher number of the population need to be vaccinated, and is typical for similar viral diseases.)



Support: Use **Resource 2a support: Vaccination diagram** to help visually demonstrate the concept of immunity through vaccinations.



Challenge: Ask pupils to write a paragraph or draw a diagram to show how a virus can be prevented from spreading by using a vaccination.

Rainbow groups (Slides 19-20, 15 mins)

Organise pupils into groups and label each group a different colour (e.g. yellow, blue, red, green, purple and orange). Give each group a different case study to read and discuss – select these from **Resource 3: Case studies**. Ask pupils to focus on the following questions:

- What is the medicine?
- Why is it used?
- How is it used?
- Is it used for every day/sometimes, for emergencies, or both (if both, explain how)?

Next, pupils make 'rainbow groups' ensuring that each group includes one person from each colour of the rainbow and so that each person in the group has read a different case study.

You may want to keep one of the case studies back to model the following activity.

In their rainbow groups, ask pupils to draw a grid on a large piece of paper with the following headings across the top: 'What?', 'Why?', 'How?', 'Every day/Emergency', and the names of the medicines down the left-hand side.

Pupils discuss the different medicines in their new groups and add the information to the grid.

Signposting support

Signposting support (Slide 21, 5 mins)

Reiterate that people use medicines differently depending on the type of illness they have. Some young people, such as those with diabetes and asthma, live with their health conditions every day and have been trained by a doctor or nurse to be able to take their medicines on their own.

Remind pupils that medicines are helpful for health but only if used correctly and stored/disposed of safely. Adults should administer medicines to children (with the exception of those mentioned above). Make pupils aware of the following webpages which offer advice and support for the health conditions in this lesson: National Eczema Society, Asthma UK, Diabetes UK and Allergy UK.

Explain that if they are ever unsure about using a medicine, they should ask a trusted adult. And if they are ever in an emergency situation and a trusted adult is not available, then they should call the emergency services on 999.

Reflection and endpoint assessment

Reflection and endpoint assessment (Slide 22, 10 mins)

Ask pupils to return to their baseline assessment activity and add to each *thinking bubble* in a different coloured pencil/pen, reflecting on what they have learnt in the lesson about what can be done to manage illness, allergies and infectious diseases.

Use this as evidence of learning and progress and to inform further teaching.

Extension activity

Medicines in emergency situations (Slide 23)

Ask pupils to identify those medicines that might be used in an emergency and focus on one medicine - inhaler, EpiPen or insulin, and then write the steps for their safe use in an emergency situation.

For example, asthma attack:

Step 1: Sit upright

Step 2: Take one puff every minute for 10 minutes

Step 3: If attack continues call an ambulance