## Teacher Refresher – Antibiotics

**Key Stage 2**

## **Information**

The body has many natural defences to help fight against harmful microbes that can cause infection. For example, the skin stops microbes entering the body, the nose has a sticky substance (mucus) which traps microbes if they are inhaled, tears contain substances which can kill bacteria and the stomach produces acid which can kill many microbes if ingested. Generally, by living a healthy life (eating a balanced diet, drinking plenty of water and getting lots of rest) these natural barriers help keep us healthy. However, in some cases, microbes can cross these barriers and enter our bodies.

The majority of the time the immune system defeats any harmful microbes entering the body, however in some cases the immune system needs help. Antibiotics are special medicines used to treat diseases caused by bacteria, such as meningitis, tuberculosis and pneumonia. They do not harm viruses or fungi. Some antibiotics stop the bacteria reproducing and others kill the bacteria.

Before antibiotics were discovered, harmful bacteria killed many people. Today however, most bacterial infections are easily treated with antibiotics - but the bacteria are fighting back. Through increased exposure to antibiotics, the bacteria are becoming resistant to them. This is known as antibiotic resistance and means that bacterial infections are once again becoming life threatening. We can help prevent this from happening through a number of ways:

* only use antibiotics prescribed by your doctor
* always finish the course once prescribed
* don’t use antibiotics for simple coughs and colds

Antiviral and antifungal medications are also available; however, it is important that these are administered by a doctor. Much of the over the counter medication available is to alleviate the symptoms of many infections, for example, pain killers or medication to reduce the temperature associated with fever.

### SH3 Antibiotic Flashcards Answers

If my doctor gives me antibiotics to take for seven days but I feel better after three days I can stop taking them – No

If my friend is ill I can give them my old antibiotics – No

Harmful microbes make us ill – Yes

Antibiotics only work on bacterial infections – Yes

I should always cover my coughs and sneezes with a tissue – Yes

I can treat coughs and colds with antibiotics – No

I should only take antibiotics prescribed by my doctor – Yes

Most of the time my immune system can fight infections like the common cold by itself – Yes

I should always wash my hands after going to the toilet – Yes

### SW1 Word Mix Up Game

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| Antibiotic | Special medicine used to treat bacterial infections |
| Bacteria | Very small microbe that can be helpful or harmful |
| Infection | A disease caused by microbes |
| Medicine | A drug used to treat a disease or injury |
| Painkiller | A drug used to take away the pain |
| Virus | The smallest of the microbes – usually harmful  |
| Symptom | A sign of illness, e.g., headache, diarrhoea, and fever |