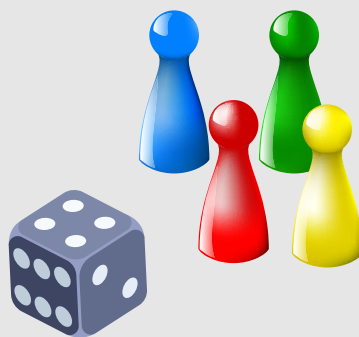


# A GAME OF LIFE AND DEATH

In this game we are going to explore bacteria and how misusing antibiotics can be a big problem.

You will need:

- A dice
- Board game player pieces
- Board game print out



## Good vs bad bacteria

First, let's think about what you know about bacteria already. Have a chat with your family.

You might know that bacteria are small germs found almost everywhere. Lots of them are helpful – like the ones that live in our guts – but some can cause infections. This is when they get into our bodies and make us sick

You can reduce the chances of getting sick from bacteria by following good hygiene practice – like washing your hands with soap regularly and cooking and storing food properly. However, even if we are really careful, we can still sometimes get an infection that can make us sick.

When you have a bacterial infection, your doctor might give you medicines called antibiotics. The antibiotics kill the bacteria to make you better.

Have you ever heard of these medicines? Have a chat with your family or group. What do you know about antibiotics already?

When antibiotics were first discovered they were very effective, but today scientists are getting worried about them. This is because the bacteria are changing and can learn how to resist the antibiotics.



## The Invention Rooms



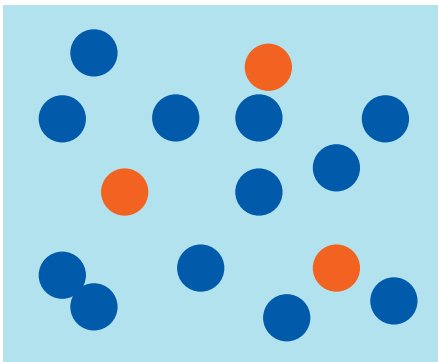
## How bacteria can fight back

Let's say you have a billion bacteria in your body because of an infection. One or two of those bacteria might have a small amount of resistance or immunity to the antibiotics your doctor has given you, which helps them to survive the first few treatments.

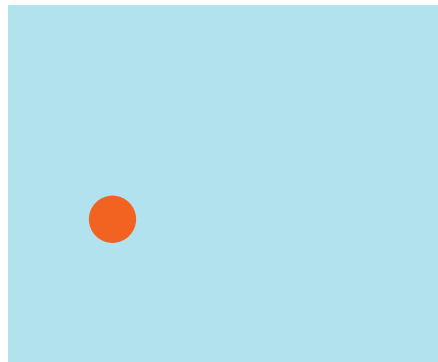
If you stop taking your antibiotics early, all the weaker bacteria will be dead, but those bacteria with immunity will be stronger. When they reproduce, their clones will be stronger and more resistant too. Now, instead of just a very small number of strong bacteria, they are all strong! If this happens enough, the bacteria might get total immunity to the antibiotics as they get stronger and stronger.

This has happened with bacteria in the past and now some – like the bacteria MRSA – are resistant to lots of different antibiotics and very hard to treat.

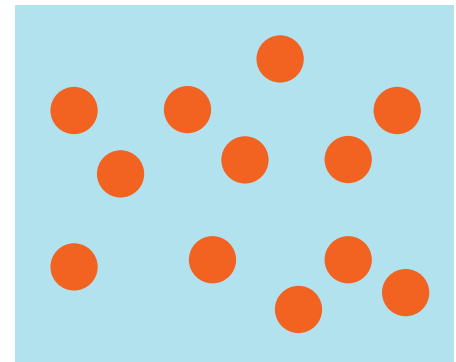
The key to stopping this is to make sure we only take the right antibiotics – that we use them for the right infections and take the full amount the doctor has given us, even if we're feeling better. Another way is try to reduce the need for taking antibiotics at all by following good hygiene practice.



Bacteria in the body. A few of the bacteria are stronger than others, we have coloured these strong bacteria orange.



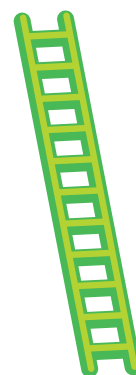
Not taking a full course of antibiotics can kill the weaker bacteria, but the resistant, strong bacteria can survive.



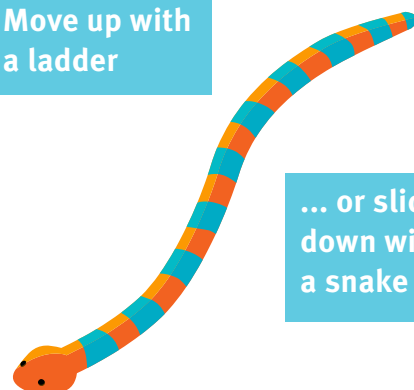
The strong bacteria now multiply, now your body is full of strong, hard to kill bacteria that are resistant to antibiotics.

## Play a Game of Life and Death

- Roll the dice to move your player from the starting point.
- If you get lucky and hit a ladder move up to where the ladder takes you.
- If you land on a snake, unlucky! You'll need to go back the end of the snake's tail!









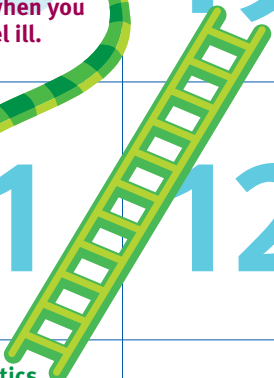


Move up with a ladder



... or slide down with a snake

# A GAME OF LIFE AND DEATH

<p><b>Winner! Well done!</b></p> 	39	38	<p>Lots of antibiotics have been misused in your local community – the bug you have is resistant to antibiotics and can't be treated.</p> 	36
<p>You accept an invitation to have your vaccinations topped-up, so you won't get sick with infections that may need to be treated by antibiotics.</p>	32	<p>You forget to wash your hands properly before you eat, spreading infections to those around you.</p> 	34	
<p>30</p> 	<p>You started taking antibiotics for a week, but forget to take all of them. Some bacteria become resistant as a result.</p> 	28	<p>You bought antibiotics on the internet, they are fake and low dose. They haven't treated the infection. Some bacteria are now resistant as a result.</p> 	<p>Your GP says you do not need antibiotics and explains the illness is a virus. You are happy with this because you know antibiotics won't work against a virus.</p>
<p>You explain to a sick friend that they need to finish their course of antibiotics even though they feel better.</p>	22	23	24	25
<p>You have saved antibiotics from your last prescription to use later, against advice. You plan to take them when you next feel ill.</p> 	19	18	17	16
<p>11</p> 	12	<p>You wash your hands properly before you eat, preventing the spread of drug-resistant infections.</p>	<p>You go to the GP with a cough and demand antibiotics even though the GP says they won't help as you have a virus.</p>	15
<p>Antibiotics are prescribed to you. You complete the whole course according to the instructions even when you start to feel better.</p>	9	8	7	<p>Your friend offers you some of their left over medicine. You say no because you know you should only take medicines prescribed.</p>
1	2	3	4	5