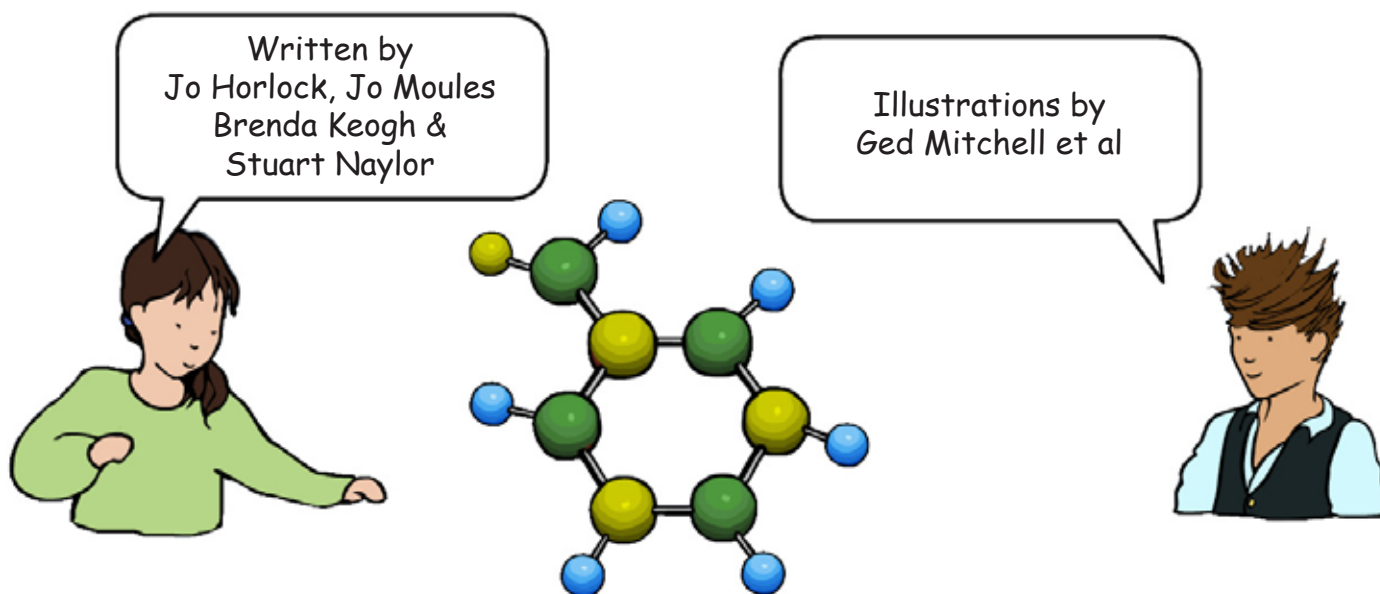


# Science Concept Cartoons®

## Set 2 - Sample Set



Produced by Millgate House Education

# Science Concept Cartoons® Set 2 - Sample Set

Concept Cartoons® are cartoon-style drawings that put forward a range of viewpoints about a particular situation. They are designed to intrigue, provoke discussion and stimulate thinking. Concept Cartoons make concepts problematic and provide a stimulus for developing ideas further.

Each Concept Cartoon can be used to stimulate a free standing discussion and enquiry. Alternatively, the Concept Cartoons can be linked together to form a larger topic or to create a project related to science.

Some Concept Cartoons may look as if they are too easy for some learners, but their deceptive simplicity can stimulate discussion about more challenging concepts and can often reveal some basic misunderstandings. Learners can create their own Concept Cartoons as a way of assessing and reviewing their current understanding.

Concept Cartoons do not always have a single right answer.

Each Concept Cartoon has support material, including ideas for follow up and some possible answers.

- \* Concept Cartoons are normally used to promote a group discussion.
- \* Ask learners to discuss why each character in the Concept Cartoon might hold their particular idea. Do they have any other ideas that might go in the blank speech bubble?
- \* Avoid being judgemental when learners are sharing their ideas. The uncertainty created by Concept Cartoons is productive.
- \* Provide an opportunity for learners to explore, challenge or consolidate the ideas raised through the Concept Cartoon(s).
- \* Provide time for learners to share their ideas.
- \* Have they changed their minds and why?

To learn more about Concept Cartoons and how they are used, visit:



[www.millgatehouse.co.uk](http://www.millgatehouse.co.uk)



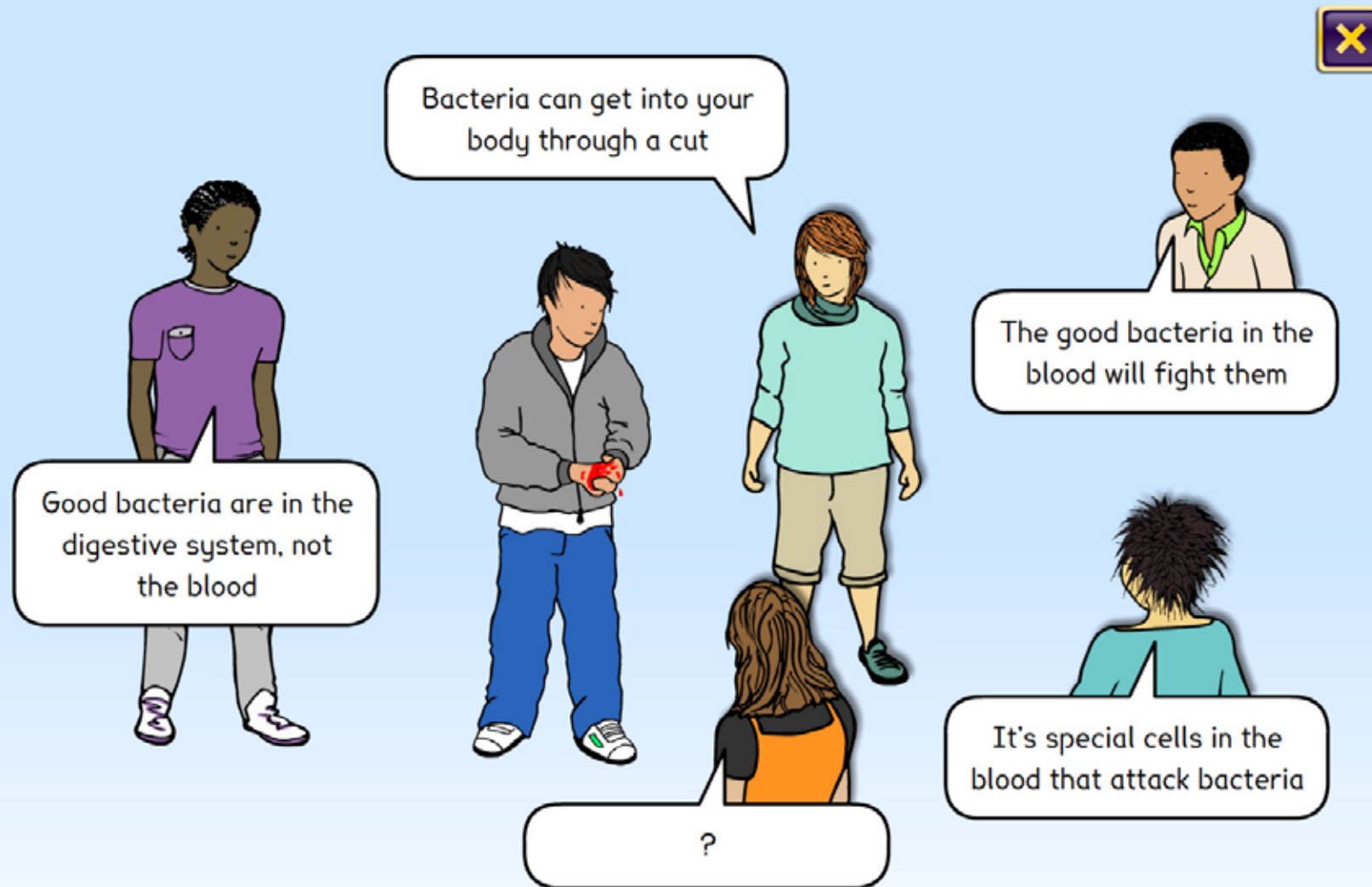
Twitter: @MillgateHouseEd

When printing out the Concept Cartoons please select the landscape setting on your printer options

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## 2.8 Bacteria in your body



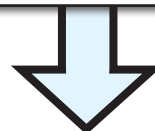
**What do YOU think?**

## Follow up

Most people think that bacteria harm us. Some people think that bacteria are only found in dirty places. Talk about whether you think these ideas are correct. Talk about what might happen if bacteria get into your body and how your body is adapted to stop bacteria getting in. Find out how your body tries to protect itself from harmful bacteria if they do get in.



Ideas



## Ideas

There are bacteria all around us. They live in soil, air, water and on the inside and outside of your body. Bacteria are not really 'good' or 'bad', they are just living things struggling to survive. Some bacteria are harmful to us, many bacteria are harmless, and some are actually helpful. Your digestive system has bacteria in it that help us digest our food, so these are useful bacteria. Some bacteria can cause illness, disease and even death. Your skin acts as a barrier to bacteria, but when you cut yourself they can enter your body and reproduce. They can produce chemicals (toxins) that make you ill. If bacteria get into your blood, white blood cells protect you by engulfing and digesting the bacteria or by making chemicals to destroy them. White blood cells are not bacteria. Chemotherapy is used to treat some cancers by stopping living cells from dividing. One side effect is that the body stops making white blood cells. Find out more about this, then produce a table to show the advantages and disadvantages of chemotherapy.