

Fighting back

gsk

Science
Education



Teachers' guidance for use with 8-11 year-olds



The activities in Fighting back can be adapted for use with younger children, from eight years of age, **with close adult supervision**. As with any written instructions, they will need a hand with some of the vocabulary depending on reading age and ability.

Lab activity teaching notes

Infection transmission

This activity can be used with younger children. You can use any small waterproof containers in place of test tubes, such as plastic cups or yoghurt pots. Dissolve some kitchen sodium bicarbonate in water to make the 'infected blood'. If you can't get hold of plastic dropping pipettes, students could use plastic picnic spoons to transfer their 'blood'.

Depending on their maturity and sense of humour, your students might enjoy buzzing malevolently as they move about biting and infecting one another.

If you don't have phenolphthalein or universal indicator solution, dip red litmus paper into the 'blood' to test for 'infection'. Sodium bicarbonate solution is an alkali, so it will turn red litmus paper blue. As a bonus, if you use litmus paper instead of a liquid indicator you could add some red food dye when you make your 'blood' for an extra yuck factor.

Independent learning teaching notes

The Independent learning sheets are designed for older students, although the 'Newborns' sheet could be used with younger children to think about how neonatal infections can be a serious problem if a baby is born away from clean water and basic hygiene tools. Some children can be squeamish about the idea of cutting the umbilical cord so do stress that it's completely natural and painless.

Film discussion ideas:

- Why do female mosquitoes bite people?
- Explain how malaria gets from one person's blood into another person's blood.
- A vaccine can protect you against a disease. What diseases have you been vaccinated against?