

**Podcast 5 *DNA: Fighting Malaria***

**Fun Activities to try**

Why not try some of these fun activities to find out more about mosquitoes, malaria and gene drive.

**A. Mosquitoes**

1. Have a look under the microscope at this close up of a mosquito biting its host.

[Under the microscope: The mosquito's bite | Animal Behaviour | Earth Touch News](https://www.earthtouchnews.com/natural-world/animal-behaviour/under-the-microscope-the-mosquitos-bite/)

1. Have a listen to the sound a mosquito makes.

[Mosquito Sound - YouTube](https://www.youtube.com/watch?v=YjirRJiXlTI&t=9s)

1. Why not have a go at making a model of a mosquito.

[How to Make a Model of a Mosquito Insect Science Project (sciencing.com)](https://sciencing.com/make-mosquito-insect-science-project-5705607.html)

1. Can you label the body parts for this mosquito?

[Label the Mosquito Activity (vtaide.com)](http://www.vtaide.com/png/mosquito-label2F.htm)

**B. Malaria**

1. Print out this poster with information all about malaria. Maybe you could make your own?

[malaria-poster.pdf (immunology.org)](https://www.immunology.org/sites/default/files/malaria-poster.pdf)

2. Print out this world map and use the article to colour in the areas of the world effected by malaria.

[FREE! - World Map Colouring Sheet | Colouring | Colouring Sheets ­](https://www.twinkl.co.uk/resource/world-map-colouring-sheet-t-tp-2663470)

[(twinkl.co.uk)](https://www.twinkl.co.uk/resource/world-map-colouring-sheet-t-tp-2663470)

[CDC - Malaria - About Malaria - Where Malaria Occurs](https://www.cdc.gov/malaria/about/distribution.html)

3. Have a go at these fun interactive games to make a vaccine to fight malaria and to decide where to spend funds to prevent malaria.

[Games — University of Oxford, Medical Sciences Division](https://www.medsci.ox.ac.uk/designer-malaria-vaccines/games)

4. Click on this animation to see how malaria is spread in the host.

[Full screen animation (abpischools.org.uk)](https://abpischools.org.uk/full-screen-animation/-1/2708)

**C. Gene Drive**

1. Read these articles and click on the video about gene drive. They describe how mosquitoes can be genetically modified so they only produce male offspring. This means that future generations can’t reproduce as this requires both males and females. Why not have a debate about this in your class?

1. What are the consequences of wiping out a species?
2. Do you think it will work? If you did this can you go back?
3. What species would you wipe out if you could and why?

[Gene Drive Mosquitoes: Ethics, Environment and Efficacy — Science Innovation Union (science-union.org)](http://science-union.org/articlelist/2019/9/20/gene-drive-mosquitoes-ethics-environment-and-efficacy)

[TRANSCEND MEDIA SERVICE » The Gene Drive Dilemma: We Can Alter Entire Species, but Should We?](https://www.transcend.org/tms/2020/01/the-gene-drive-dilemma-we-can-alter-entire-species-but-should-we/)

[Gene drive: self-destructing mosquitoes - Mosquito Alert](http://www.mosquitoalert.com/en/gene-drive-self-destructing-mosquitoes/)

[Florida mosquitoes: 750 million genetically modified insects to be released - BBC News](https://www.bbc.co.uk/news/world-us-canada-53856776)

[Bill Gates: Some People Think Eradicating Mosquitoes With Genetics Is Scary, But I Don't Think It Will Be (forbes.com)](https://www.forbes.com/sites/matthewherper/2016/06/10/bill-gates-says-gene-drives-to-eradicate-some-mosquito-species-could-be-ready-for-in-two-years/?sh=48f38301e8b9)

This is a really interesting video: [What If We Killed All Mosquitoes? - YouTube](https://www.youtube.com/watch?v=9w-5wJYVmcw)

To find out more about *The DNA Detectives: The Stone Age Mystery* book and to order copies click here

<https://insightandperspective.co.uk/primary-science-the-dna-detectives>