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Lesson 1:

What is a Model Organism?

Directions:

1. Listed below are links to Internet articles and videos about model organisms. Read or watch each one. Note that in some of these resources, a *model* organism is sometimes referred to as a *research* organism.
   1. [“What is a Research Organism?”](https://www.nigms.nih.gov/education/fact-sheets/Pages/using-research-organisms.aspx) (article from National Institute of General Medical Sciences)
   2. [“Pathways: The Fascinating Cells of Research Organisms”](https://www.youtube.com/watch?v=ibSbNUhCNIo&list=PL9fzcZ7JxMmZry8oLhKq9Iaf4EPVinIXf&index=5) (Video from the National Institute of General Medical Sciences)
   3. [“Should We Keep Using Lab Rats? The Debate Over Model Organisms”](https://www.youtube.com/watch?v=fCjz0dS4FX0) (video from the Nature League)
   4. [“Should Animals Be Used in Research?”](https://www.yourgenome.org/debates/should-animals-be-used-in-research/#q0) (article from the yourgenome website)
2. Based on what you learned from the resources above, work with your partner/group to answer the following questions. Feel free to go back and review each resource.
3. In simple terms, what is a model/research organism?

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1. Describe 3 characteristics of an ideal model organism.

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1. For 5 separate species of model organisms, list how each one has been used to study human health.

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1. Describe at least 3 potential benefits of using model organisms in biomedical research.

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1. Describe at least 3 potential drawbacks of using model organisms in biomedical research.

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1. In your opinion, should model organisms be used in biomedical research? Provide an explanation.

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