

**Science 9**  
**Unit A: Biological Diversity**  
**Lesson 5**  
**Practice Worksheet 3: Natural Selection PhET Simulation**

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Use the Natural Selection Simulation (the link is in the online course) to complete the following questions.

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**Question 1**

Play with the simulation for five minutes, then complete the table below with your observations.

How can you...	What did you change?	How many generations did it take?
...make more white bunnies?		
...make twenty brown bunnies?		

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**Question 2**

Find a way to make the bunnies brown fur take over. Complete the table with your selections.

Mutation	Environment	Selection Factor	Observations
<b>Brown Fur</b>			

**Question 3**

Find a way to make one hundred bunnies when food is a selection factor.  
Complete the table with your selections.

Mutation	Environment	Selection Factor	Observations
		<b>Food</b>	

**Question 4**

Find a way for the bunnies to take over when the environment is the Arctic.  
Complete the table with your selections.

Mutation	Environment	Selection Factor	Observations
	<b>Arctic</b>		

**Question 5**

Simulations are useful for understanding how natural processes work, but they are not always representative of the real world. How does this simulation differ from what might happen in a true ecosystem?

**Congratulations! You have completed this practice worksheet.**

Now it's time to carefully compare your answers to the suggested answers in the online course. When comparing, you should feel free to make changes to your answers or make extra notes.

**Keep this practice worksheet for study purposes.** Using practice worksheets as a study tool to review for exams is a great idea.

**If you unsure about any of the questions or answers, or you just want more feedback, share this practice worksheet with your teacher and ask for assistance.** You can do that by emailing the teacher, or by submitting it in the Course Questions Forum in the online course. If you are using this practice worksheet in Google Drive, don't forget to change the sharing settings so that anyone can view it before sending the link to your teacher.

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