

**Science 9**  
**Unit D: Electrical Principles and Technologies**  
**Lesson 6**  
**Practice Worksheet 42: Conductors and Insulators**

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Open the Conductors and Insulators simulation using the link in the online course. Note that this is an Adobe Flash simulation. If you cannot get this simulation to work, don't worry, this activity and worksheet is optional. Just make sure to read pages 298-302 in the Science in Action textbook carefully. You might also consider taking your best guess for the materials in question 1, and then check the answers in the online course.

To complete this simulation, drag each object down to hook it up to the circuit with the alligator clips. Once you have tested an item, move it back up to the top of the page.

Complete the following questions as you work through the simulation.

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**Question 1**

Observe what happens to the electrical circuit as you test each object. Record your evidence in the table below.

<b>Material Tested in Circuit</b>	<b>Does it Conduct Electricity? (Write Yes or No)</b>	<b>Evidence (How do you know if it conducts electricity or not?)</b>
Alloy		
Pure water		
Salt water		
Copper		
Glass		
Wood		
Graphite		
Aluminum		
Plastic		

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**Question 2**

List the materials that are better at **conducting** electricity.

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**Question 3**

List the materials that are better at **insulating** electricity.

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**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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