



# Scientist

## Webelos Activity Workbook

This workbook is not required but can help you with this activity badge. Your Webelos Den Leader approves your work. No one can add or subtract from the requirements. Webelos Workbooks and much more are below: [Online Resources](#).

Send comments to: [craig@craiglincoln.com](mailto:craig@craiglincoln.com). Workbook updated: March 2008.

**Scout's Name:** \_\_\_\_\_ **Pack:** \_\_\_\_\_ **Activity Badge Counselor:** \_\_\_\_\_

### Do these:

1. Read Bernoulli's Principle. Show how it works. \_\_\_\_\_  
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\_\_\_\_\_
2. Read Pascal's Law. Tell about some inventions that use Pascal's law. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
3. Read Newton's first law of motion. Show in three different ways how inertia works. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4. While you are a Webelos Scout, earn the Cub Scout Academics belt loop for Science. *(All boys may earn belt loops and pins more than once...Cub Scout Academics and Sports Program Guide p. 4)* \_\_\_\_\_  
\_\_\_\_\_

### And do six of these:

5. Show the effects of atmospheric pressure. \_\_\_\_\_  
\_\_\_\_\_
6. Show the effects of air pressure. \_\_\_\_\_  
\_\_\_\_\_
7. Show the effects of water pressure. This may be combined with atmospheric pressure or with air pressure. \_\_\_\_\_  
\_\_\_\_\_
8. With adult supervision, build and launch a model rocket. Describe how Newton's third law of motion explains how the rocket is propelled into the sky. \_\_\_\_\_  
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\_\_\_\_\_
9. Explain what causes fog. Show how this works. \_\_\_\_\_  
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\_\_\_\_\_
10. Explain how crystals are formed. Make some. \_\_\_\_\_

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\_\_\_\_\_

11. Explain how you use your center of gravity to keep your balance. \_\_\_\_\_

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\_\_\_\_\_

Show three different balancing tricks.

\_\_\_\_\_  
\_\_\_\_\_

12. Show in three different ways how your eyes work together, and show what is meant by an optical illusion.

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13. While you are a Webelos Scout, earn the Cub Scout Academics belt loop for Weather. *(All boys may earn belt loops and pins more than once...Cub Scout Academics and Sports Program Guide p. 4)* \_\_\_\_\_

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14. While you are a Webelos Scout, earn the Cub Scout Academics belt loop for Astronomy. *(All boys may earn belt loops and pins more than once...Cub Scout Academics and Sports Program Guide p. 4)* \_\_\_\_\_

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**Online Resources** *(Use any Internet resource with caution and only with your parent's or guardian's permission.)*

Scientist is helping to prepare you for [Engineering](#), [Chemistry](#), and [Weather](#) Merit Badges.

**Webelos Activity Badge Workbooks:** <http://usscouts.org/advance/cubscout/webbadges.asp>

Boy Scouts: <http://www.scouting.org/> ▶ [Scout](#) ▶ [Tenderfoot](#) ▶ [Second Class](#) ▶ [First Class](#) 📺 [Rank Videos](#)  
[Guide to Safe Scouting](#) [Safe Swim Defense](#) [Safety Afloat](#) [Blood Borne Pathogens](#) [Youth Protection Training](#)

**Boy Scout Merit Badge Workbooks:** [usscouts.org](http://usscouts.org) -or- [meritbadge.org](http://meritbadge.org) ▶ **Merit Badge Books:** [www.scoutstuff.org](http://www.scoutstuff.org)

Amer. Institute of Chemical Eng.: <http://www.aiche.org> Amer. Soc. of Civil Eng.: <http://www.asce.org>

ASME (Amer. Soc. of Mechanical Eng.): <http://www.asme.org> Institute of Electrical and Electronics Eng.: <http://www.ieee.org>