Step 1: Make an Observation
How to Make Observations Using the Scientific Method
http://www.ehow.com/how_2052859_make-observations-using-scientific-method.html

1. What are the two main sections of a scientific observation? Define each.

How to Make Observations Like a Scientist
http://ideas.time.com/2012/05/02/how-to-increase-your-powers-of-observation/

2. What is the difference between casual observers and scientific observers?

Make observations about the dirty dog scenario.

Step 2: Form a Question
How Stuff Works
http://science.howstuffworks.com/innovation/scientific-experiments/scientific-method6.htm
Scroll down to step 2: *Ask a Question*

3. What is the purpose of the question?

4. Does construction of scientific questions require training as a scientist?

Ask a question based on the dirty dog scenario.

Step 3: Form a Hypothesis
Science Buddies
http://www.sciencebuddies.org/science-fair-projects/project_hypothesis.shtml

5. Define the term hypothesis.
6. What is the major requirement for your topic?

The Experimental Method
http://www.colby.edu/biology/B117x/expt_method.html

7. List the five characteristics of a good hypothesis.

Write a hypothesis for the dirty dog scenario.

Step 4: Experiment
How Stuff Works
http://science.howstuffworks.com/scientific-method7.htm

8. What is the purpose of a control group?

9. Why is it important to hold all variables constant, other than the one being tested?

Design an experiment with step-by-step directions to test which product will best clean the carpet. Tomorrow we will conduct the experiment, and record all data.

Step 5: Analyze your Data

Data Analysis
http://scidiv.bellevuecollege.edu/rkr/Biology211/labs/pdfs/DataAnalysis211.pdf

10. Define the term data.

11. Why do you need to analyze your data?

12. Define the term graph and list four types of graphs.

For Day 2: Write an analysis of your data based on your results of the experiment. Since your results are qualitative, you do not need to construct a graph.
Step 6: Conclusion

The Scientific Method
http://www.brandonbeltz.com/scimeth/conclusion1.htm

13. How do scientists draw conclusions?

Scientific Method-Conclusion of a Science Fair Project
http://sciencefairproject.virtualave.net/conclusion.htm

14. What three things should your conclusion be?

The Scientific Method

15. What you need to do if your hypothesis is wrong?

For Day 2: Draw conclusions based on the results of your experiment.