



Science Fair Projects

3rd Grade to 5th Grade

Title: Physical Science

"Rusty Magnets"

Stating the Problem - The Big Question

Write a question that asks what you want to learn from your experiment by testing the strength of rusty magnets.

Forming a Hypothesis - A Smart Guess

Before you begin experimenting with the rusty magnets, write a prediction, or hypothesis, about what the results of your experiment will prove.

Planning the Procedure

Before a scientist begins experimenting, he or she usually spends some time reading what other scientists have learned about the topic. This information is helpful when planning the procedure for the experiment. Read some information about the different kinds of magnets, how they are made and their uses.

Write the steps of your experiment. Include the following information:

- ❖ A list of materials that will be needed.
- ❖ Kinds of magnets you will use.
- ❖ How you will make your magnets rusty. How you will test your magnet's strength. Will you pick up paper clips? Pins? Nails? Time you will need for your experiment. One week? Two weeks? One month?

Make a chart on which to record the data from your experiment. The following chart should help you with your data.

Chart

Magnet Type	Paper Clips Picked Up		
	1 st Try	2 nd Try	3 rd Try
Horseshoe (not rusty)			
Horseshoe (rusty)			
Bar (not rusty)			
Bar (rusty)			

This project is from Daryl Vriesenga's book, *Science Fair Projects, Grades 4-6*, Michigan, Schaffer Publications, 1990. The Guide is available on line at: SchooDoodle.com



Science Fair Projects

3rd Grade to 5th Grade

Title: Physical Science

"Rusty Magnets" (continued)

Recording Results

The time has come to perform your experiment. Collecting the data can be fun. Be sure to keep accurate records of the strength of your magnets by using the chart that you made to record the data.

Drawing a Conclusion

Before you did your experiment you made a prediction, or hypothesis, about what would happen to the strength of a magnet after it became rusty. How accurate was your prediction?

Write a report explaining what you learned from your experiment. Your report should include your Big Question, your hypothesis, a description of your experiment, the data that you wrote on your chart and an explanation of what you learned about the strength of a rusty magnet.

Display

One way to share what you have learned from your experiment is to make a display. You will want to display your magnets and explain how you tested the strength of each one. Also display your report and the chart used to record the data from the experiment. You may want to include illustrations and pictures of different kinds of magnets and their magnetic fields.

Extra Credit

There may be some other experiments with magnets that you will want to try. What kinds of materials will magnets attract? How can you demonstrate the poles of a magnet? Does your magnet weigh more or less when it becomes rusty?

Enter Coupon Code **SCIENCE** for 20% OFF your entire purchase on



This project is from Daryl Vriesenga's book, *Science Fair Projects, Grades 4-6*, Michigan, Schaffer Publications, 1990. The Guide is available on line at: SchooDoodle.com