



Girl Scouts of Minnesota and Wisconsin River Valleys



## ELECTRICITY PARTY GIRL SCOUT BROWNIE TRY-IT

### **Introduction**

The Bakken is a Library and Museum of Electricity in Life. Their mission is to further the understanding of the history, cultural context, and applications of electricity and magnetism in the life sciences and their benefits to contemporary society.

Girl Scouts of Minnesota and Wisconsin River Valleys has been proud to have collaborated with The Bakken since 2002 to provide program opportunities for Girl Scouts to educate and excite them about science. This Try-It was developed by Bakken staff in partnership with River Valleys staff.

This Try-It is an "Our Own Council's" Try-It, meaning it was developed especially for Girl Scouts in our council. This Try-It is an earned award, meaning it may be worn on the front of the uniform sash/vest.

The purpose of this Try-It is to help girls learn about electricity, in particular electricity in everyday life, in fun and hands-on ways.

The name of this Try-It, "Electricity Party," comes from the days of Benjamin Franklin, when early inventors and scientists would hold parties to conduct experiments and other discovery processes.

### **Instructions For Adults Working With Girls**

Please review the Activity Checkpoints for "Science" in *Safety-Wise* (pp. 134-5) before working on this award.

This Try-It may be earned in a variety of ways. All but one requirement has both an activity option to do in your troop/group or at home, and an activity option to do at The Bakken; you may do all activities "In Your Troop/Group or At Home," all "At The Bakken," or mix and match.

- The "In Your Troop/Group or At Home" activity options are designed to be easy for leaders to facilitate; they require just a few supplies that can be found at home or in local stores.
- When choosing an "At The Bakken" activity option, visit the museum during regular museum hours (check [www.thebakken.org](http://www.thebakken.org) or call 612-926-3878 for current hours and directions); Girl Scouts receive a discount on museum admission (mention the Girl Scout rate when paying). When you choose this option, visit the particular exhibit listed and do the specific activities listed (self-guided). The museum is located at 3537 Zenith Avenue South, Minneapolis.

In addition, the Try-It may be earned in an event format. Check your *GSCGM Program Bulletin* (Council Events For Brownie Girl Scouts section) for information on the "Electricity Party Try-It Day" council events.

Once girls have earned the Try-It, the patches may be purchased through the Girl Scout Store. (If they earn the Try-It at an "Electricity Party Try-It Day" council event, they will receive the patches at the event.)

Your feedback on this Try-It is important! Upon completion, girls and adults are asked to photocopy, fill out, and turn in the attached evaluations. (If girls earn the Try-It at an "Electricity Party Try-It Day" council event, they will receive evaluations at the event.)

If you have questions about this Try-It, please contact your River Valleys Program Department staff at 651-227-8835. Additional copies of this packet may be purchased through the Girl Scout Store.

## Requirements

Try at least four total of the six activities listed.



### 1. Static And You

#### In Your Troop/Group or At Home

When things rub together, they can make a kind of electricity called “static electricity.” Some signs that you have made static electricity are shocks, your hair standing on end, things sticking together (like socks fresh from a clothes dryer) or a spark. One of the easiest ways to make static electricity is to rub a balloon\*\* on your hair. You can prove that the balloon is charged with static electricity because things will want to attract and stick to it – such as walls, small pieces of paper or even your hair if you hold the balloon by it. Find out what else you can rub on your hair to make static electricity.

Create a chart of things that will and will not make static electricity when rubbed on your head. Remember: to test for static electricity, find out if the rubbed thing will pick up small pieces of paper, or make the hair on your head or arm stand up.

Yes Elec.	No Elec.

\*\*Note to Adults: Before using latex balloons, ensure that none of the girls has a latex allergy. Any balloon or anything plastic is an “insulator” and provides a good charge and will work, so if you need an alternative to latex, use another type of balloon, or a beach ball or other plastic toy.

#### At The Bakken

Visit the Static Party Room and do the "Gray" and "Franklin" activities.



### 2. Static Without You

#### In Your Troop/Group or At Home

Static electricity can be made by rubbing many different things other than your hair. Explore your meeting site or home and find out what two things you can rub together, not including your hair, to make static electricity. Draw a picture or make a list of the best objects. What do they have in common? Remember: to test for static electricity, hold an object over your head or arm, and find out if the hair stands up.

#### At The Bakken

Visit the Static Party Room and do the "Thales," "Gilbert," and “DuFay” activities.

### 3. Electricity Hunt



#### In Your Troop/Group or At Home

Not all electricity is static. Some, called "current electricity," powers most things in buildings and your home. Find all of the things in your meeting site or home that use electricity; draw a picture or make a list of everything you found. What would your life be like without electricity? Draw a picture or write a story.

#### 4. Batteries Are In...



##### In Your Troop/Group or At Home

Some electricity comes from big power plants and is sent into buildings and your home through wires; but, some electricity comes from batteries. What uses batteries in your meeting site or at home? Draw a picture or make a list of all of the things you found that use batteries.

##### At The Bakken

Visit the Batteries Exhibit and explore with the "Mini Circuits."

#### 5. Batteries



##### In Your Troop/Group or At Home

Find as many different batteries as you can (at home or at a store). Compare them. What is the same about the batteries? What is different about the batteries?

What does the letter "V" stand for?

Can you find the following things:

- the number listed after the letter "V"
- the "+" and "-"
- the name/type of the battery (for example, "AA")
- if it is an "alkaline" or other style of battery

Same	Different

Can you put them in order by size?

Can you put them in order by the number listed after the letter "V?"

##### At The Bakken

Visit the Batteries Exhibit and explore the "Hand Battery Station" with the worksheet you can get at the museum.

#### 6. Magnet Strength



##### In Your Troop/Group or At Home

- a. Some magnets are stronger than others. Gather all of the magnets you can find (you will need at least 5 different magnets).
- b. Use one of the following tests to find the strongest and weakest magnets (or create your own test):
  - Which magnet can pick up the most paperclips?
  - Have a magnet tug of war (which magnet can pull a paperclip away from the others?).
  - How many pieces of paper can each magnet hold on a refrigerator or another metal thing?

##### At The Bakken

Play with the Magnets and the TV Set. Which magnet is stronger? How can you tell? What else can you discover?



Girl Scouts of Minnesota and Wisconsin River Valleys

**ELECTRICITY PARTY**  
**GIRL SCOUT BROWNIE TRY-IT**  
**GIRL EVALUATION**

Troop/Group # \_\_\_\_\_ or  Girl Scout Juliette Age \_\_\_\_\_

What did you like best about this Try-It? \_\_\_\_\_

What did you like least about this Try-It? \_\_\_\_\_

Were any parts of this Try-It too hard?  Yes  No

If yes, which part(s)? \_\_\_\_\_

What new things did you learn about electricity? \_\_\_\_\_

Name one kind of electricity. \_\_\_\_\_

Name one thing that uses electricity. \_\_\_\_\_

How fun was this Try-It?



Awesome



Good



OK



Not So Good



Awful

**Thank you for doing this evaluation and returning it to  
Your leader/parent/guardian (to forward to the  
Brooklyn Center Service Center) when you are done with the Try-It.**

**5601 BROOKLYN BOULEVARD  
BROOKLYN CENTER, MN 55429  
FAX: 763-535-7524**



Girl Scouts of Minnesota and Wisconsin River Valleys

**ELECTRICITY PARTY  
BROWNIE GIRL SCOUT TRY-IT  
ADULT EVALUATION**

Troop/Group # \_\_\_\_\_ (if applicable) Service Unit \_\_\_\_\_

# of Girls who participated \_\_\_\_\_ Age(s) of Girls who participated \_\_\_\_\_

When did the girl(s) do this Try-It? \_\_\_\_\_

How did the girl(s) do this Try-It (i.e., number of activities completed, setting/format, etc.)? \_\_\_\_\_

Please comment on how user-friendly you found this Try-It. \_\_\_\_\_

What was the most satisfying part of this Try-It for you? \_\_\_\_\_

For the girl(s)? \_\_\_\_\_

What was the most challenging part of this Try-It for you? \_\_\_\_\_

For the girl(s)? \_\_\_\_\_

What did you observe the girls learning through doing this Try-It? \_\_\_\_\_

Other Comments \_\_\_\_\_

**Thank you for completing this evaluation and returning it (to the Brooklyn Center Service Center), with the girl evaluation(s), upon completion of the Try-It.**

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