

Mix it Up!

Guiding Middle School Girls to Success



GET PERSPECTIVE!

Activity Objective: Girls gain awareness of the importance of observation and the perspective that science affords

Toward Leadership Outcomes:

Through this activity, girls will:

- ✓ Seek challenges—Girls develop positive attitudes toward learning, seek opportunities for expanding their knowledge and skills, set challenging goals for themselves, and take appropriate risks. **(Discover)**
- ✓ Develop a strong sense of self—Girls have confidence in themselves and their abilities, feel they are able to achieve their goals, and form positive gender, social, and cultural identities. **(Discover)**

Experience Overview:

2 minutes	<i>Introduction (Talking Points)</i>
10 minutes	<i>Are You a Lefty or a Righty?</i>
15-20 minutes	<i>Switch It Up!</i>
10-15 minutes	<i>Perspective Plus</i>
10-15 minutes	<i>Reflection/Discussion</i>

Supplies Needed:

- ✓ Paper and pens or pencils (enough for each girl)
- ✓ Empty paper towel or toilet paper tubes (as many as possible)
- ✓ Large pad of paper (or chalkboard)

Prepare Ahead:

- ✓ Read over the entire activity before meeting with girls. Read through. (or make copies for girls) of the “Are You a Lefty or a Righty—Brain, That Is?” handout.

SCIENCE & TECH ACTIVITY 2

DISCOVER:

- » Develop a strong sense of self
- » Seek challenges in the world

Step-by-Step Instructions:

» Introduction (Talking Points) (2 minutes)

- ✓ Say something like: “Today’s fun activity is about learning to look at things in a new way. Scientists are not only masters of observation, but they also must practice being open-minded in order to constantly see things with fresh eyes. You cannot invent something new if you are always looking at your environment in the same old way. It all depends on your perspective.”

» Are You a Lefty or a Righty? (10 minutes)

- ✓ Distribute paper and pens or pencils.
- ✓ Tell girls that you are going to do a few quick “experiments.”
- ✓ Instruct girls to pick up their pen or pencil and hand it to their neighbor. Ask girls: “Which hand did you use to pick up your pen or pencil?”
- ✓ Instruct girls to interlock their fingers. Ask girls: “Which thumb is on top?”
- ✓ Instruct girls to cross their arms across their chest. Ask girls: “Which hand is on top?”
- ✓ Ask girls to look through the paper towel or toilet paper tube at a distant object. Ask girls: “With which eye do you look through the tube?”
- ✓ Ask girls: “So, which side of the brain are you? Are you a lefty or a righty?”
- ✓ Use information you learned from the “Are You a Lefty or a Righty—Brain, That Is?” handout to jumpstart a discussion with the girls. You can also make copies of the handout and ask a girl to read it aloud.

» Switch It Up! (15-20 minutes)

- ✓ Say something like this: “Since the side of the brain we use most gets a daily workout, let’s try the following activity using our nondominant hands so we can begin to strengthen the other parts of our brains, or the other parts of ourselves.”
- ✓ Separate the group into pairs.

- ✓ One girl in each pair asks two questions of her partner, and should record a short answer (one or two sentences) with her nondominant hand:
 - » “If you could travel to any country or place in the world, where would it be, and why?”
 - » “Who is your favorite music group, and why?”
- ✓ Repeat the process, reversing the roles of interviewer/recorder.

» Perspective Plus (10-15 minutes)

- ✓ Say something like this: “We know that scientists must stay aware of their perspective—that is, to be sure they keep looking at things with new and fresh eyes—but what other qualities does a scientist have or need? Let’s make a list.”
- ✓ On a large pad of paper (or chalkboard), write the word “Scientists...” Ask a girl to lead this sentence completion activity. The list might look something like this:

Scientists...

- | | |
|---------------------------------|---------------|
| » Have perspective (fresh eyes) | » Communicate |
| » Observe | » Collect |
| » Compare | » Classify |
| » Create | » Invent |
| » Hypothesize | » Experiment |
| » Interpret | |
- ✓ Ask each girl to identify at least two qualities or skills on the list that she already has.

Mix it Up!

Guiding Middle School Girls to Success



» Reflection/Discussion (10 minutes)

Some talking points:

- ✓ “Scientists not only observe the world and its natural phenomena, but they also try to look at things in new ways. We can draw on this unique ability as we do many of the activities in our meetings—thinking about products that girls and others sell, about how those products came to be, how they were designed, and why and how people continue to be innovative and create new things.”
- ✓ Ask girls: “In what other areas of your life could a new perspective be helpful? Why?”
- ✓ Encourage girls to set a period of time to use their nondominant hand instead of their dominant one (being aware of safety), and observe whether they feel any different or experience things in a different way.