Activity 5

Workin' It Out

EXPLORE HOW TO STAY FIT THE FUN WAY.

Staying active is an important part of your overall health. The key is to find activities that both raise your heart rate and that you enjoy doing. It is best to find a balance of aerobic activities for a healthy heart, strength training for strong muscles and bones, and activities that improve your flexibility to reduce injury.

You'll Need:

1 hour

- large room or outdoor space
- supplies for activities (as needed)

For each pair

- stopwatch
- pencil and paper
- water (for drinking)

SMART START: Prepare three stations, each with a different activity, with room for several pairs to try each activity at the same time. Visit scigirlsconnect.org/page/workinitout or check out these websites for activity ideas: fit.webmd.com/kids/move/article/exercise-types and girlshealth.gov/fitness/exercise/index.cfm.

POINTER: If some of your girls aren't able to do strenuous activities, make sure to include some low impact options they can test.

Here's how:

1. Introduce the experiment. Doctors recommend that girls ages 8-13 get 60 minutes of activity 5 days a week. Ask girls what their favorite types of physical activity are (running, biking soccer, cheerleading).[2] Then ask them to classify each activity as a strength, aerobic, or flexibility exercise. Do some activities fit more than one category? Introduce the **SciGirls Challenge**: Which activities are the hardest, but also most fun to do?

2. Brainstorm. Describe the three activities that the girls will be testing in this activity, chosen from one of the websites suggested in the Smart Start. Working in small groups[1], have the girls design an experiment[3] to determine which activity offers the highest level of difficulty and the most enjoyment. Some things to consider are:

- **Difficulty measurement.** The girls can measure an activity's level of difficulty by testing their ability to sing or talk. If they can sing while doing it without getting out of breath, the activity is easy. If they find it hard to have a normal conversation, the activity is very difficult. Create a scale (e.g., from 1 -10) to compare the different activities.
- **Likeability measurement.** Likeability can be measured on a 5-point scale with the girls agreeing on descriptors to maintain consistency.
- **Length of time.** The girls should perform all activities for the same length of time to be able to compare them accurately. (For these activities, 10 minutes is a good amount of time.)

Workin' It Out continued

To see how the SciGirls set up their experiment, watch the *SciGirls Explore* DVD. (Select Workin' It Out: Brainstorm.)

POINTER: Use this activity as an opportunity to talk about bias. How can the girls make sure that their opinion of the activity is not being influenced by their peers?

3. Collect data. Ask the girls to make predictions before starting each activity.Test each one by rotating through the stations. Remind girls to take a few minutes before moving to the next station to record their difficulty and likeability measurements.

4. Analyze and share. Once all the activities have been tested, have the girls organize their data into a graph that allows them to find a relationship between the likeability and difficulty of an activity[4]. Share results. Are there any patterns? Were some activities really popular and really difficult? What characteristics of these activities are most similar to the physical activities you brainstormed at the beginning?[6]

Mentor Moment

Dr. Daheia Barr-Anderson is a public health scientist at the University of South Carolina who focuses on physical activity, sedentary behaviors, and obesity prevention in children and teenagers. Daheia enjoys spending time with her two young daughters, reading, and getting a lot of exercise by running, doing yoga, cycling, kickboxing, and dancing!

Learn about Daheia's career and personal life on the *SciGirls Explore* DVD. (Select Workin' It Out: Mentor Moment).[7]

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Standards Correlation

The activities in this book align to national education standards including: Standards for Technological Literacy, Next Generation Science Standards and the Common Core Standards for Mathematics. To download the complete and most current alignments, please visit scigirlsconnect.org.

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[1-7] See **SciGirls Seven** strategies on page 3.