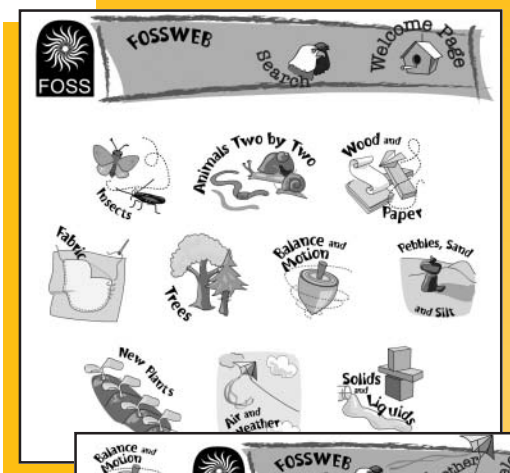


BALANCE AND MOTION MODULE

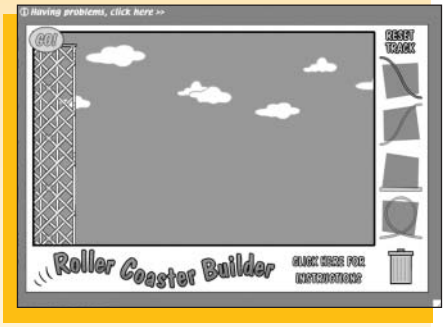
On the Welcome page, click Preview under the grades K–2 flag to see a brief overview of the K–2 site.

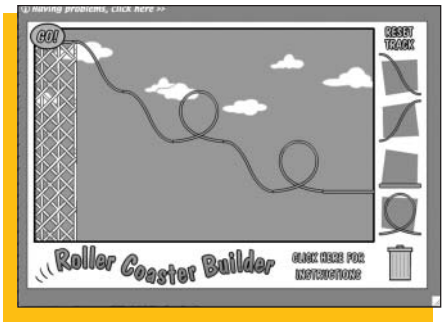
Click the grades K–2 icon to get a menu that links to each of the K–2 modules. There you can choose Balance and Motion and travel to a wealth of information and activities specific to that module for students, parents, and teachers. The section for students has an interactive activity, a photo gallery, an "Ask a Scientist" section, websites, and movies. Parents and teachers can go to a module summary, a vocabulary list, a link to home/school connections, resources, and tips and tricks for using FOSS in the classroom.

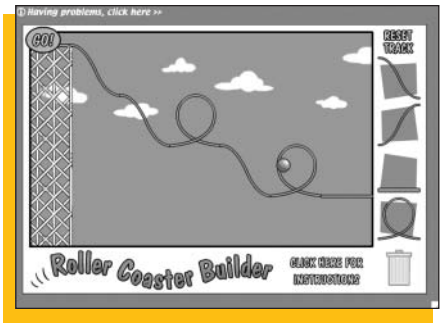
If possible, introduce FOSSweb to students using a computer connected to a large monitor or digital projector. After a group introduction, move students to the computer lab or to computer stations in your classroom. Students in grades K–2 will get the most out of FOSSweb if an adult or older student is nearby to guide their explorations. After students have been oriented to the site, you can allow more free exploration.

In Balance and Motion, you'll find an activity called Roller Coaster Builder. Students design a roller coaster with different track pieces and then try it out to see how far a ball rolls. Try the game yourself before introducing it to the class. Plan to introduce this activity after students have created their own roller coasters in Investigation 3, *Rollers*. You might ask,

- *What did we use to create our class roller coaster?*
- *How many different ways could you arrange the foam pieces?*

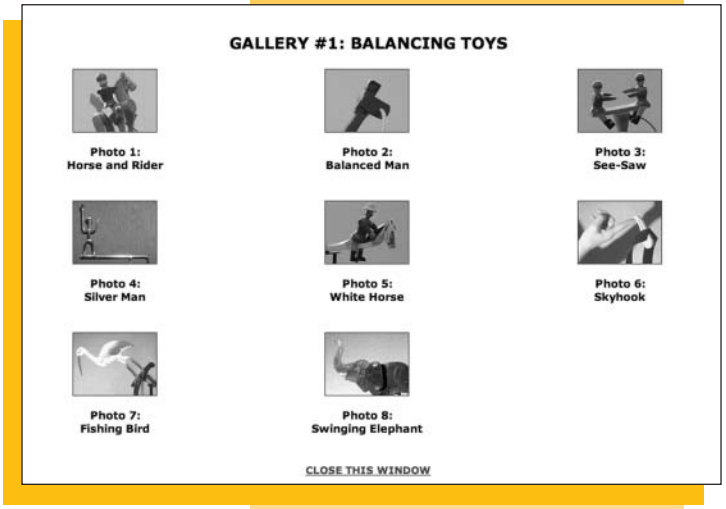






- *Which ways did you arrange the foam pieces to make the ball roll faster? Farther?*
- *How would you put the pieces together to have the most fun ride?*

If necessary, review the ways students arranged the foam, for example, as loops, twists, and straightaways. At the computer, have the class observe the different shapes students can put together for a roller coaster and show how to move the pieces to fit them together. As a class, decide which six pieces to use and in which order to use them for the roller coaster. Explain how to remove a piece from the roller coaster by dragging it to the trash can. Start again by clicking Reset Track. Once you have designed the roller coaster, click GO and watch what happens. If the ball doesn't make it all the way to the end, have students suggest changes to the roller coaster and try again. Once you have been successful as a class, have students move to a computer to create their own roller coasters.



The Photo Gallery includes images of balancing toys. You can use the images to discuss the objects, including whether students have ever encountered them and how the toy is like or different from the objects they tried out in the Balance and Motion investigations.

In Ask a Scientist, students can review questions about balance and motion that have been submitted by other students and ask appropriate questions of their own. Adult guidance in submitting questions is highly recommended.

Websites include links to sites that can extend student experiences with the **Balance and Motion Module.** The links may inspire some new projects and investigations involving balance and motion.

Movies show spinning tops and disks, swinging toys, and amusement-park rides for students to watch and compare to their experiences in the **Balance and Motion Module.**