

LETTER FOR AIR AND WEATHER MODULE

Hello Teachers and Families,

During school closures, the FOSS team will be expanding the **Home/School Connection Center** on the FOSS website <https://www.fossweb.com>. Families can access Home/School Connections and many other resources (multimedia, streaming video, and *FOSS Science Resources* interactive e-book) on FOSSweb through the class pages set up by the teacher. The teacher will need to provide the class username and password for full access. Teachers can leave notes on FOSSweb class pages for students, or, instead, send messages to students through other established parent communication apps or emails.

If the teacher has not set up Class Pages, families can still access the **Home/School Connections Center** page from the main FOSSweb login page. No registration is necessary for this access.

The Home/School Connections for each module are active investigations that can be conducted at home (inside or outdoors). Over the weeks, we will be adding new activities that are part of the existing FOSS module to be used in class, but formatted for students and families to access at home.

Please refer to the teacher's communications home for specific expectations for assignments. The teacher may suggest *FOSS Science Resources* readings, videos, and multimedia from investigations in the module.

For Students and Families: To sign in to FOSSweb, use the user name and password provided by your teacher. This might be a Common Class or Individual Student login. Here's a short video to get you started on FOSSweb

For Student Sign in Video: <https://youtu.be/Fcfjbt7Li2k>

For FOSSweb help: <https://www.fossweb.com/student-parent-help>

Preview the **Module/Course Summary** from the Student Page. The **Module Overview** is available to download as a PDF. The first few pages of the Overview will help to set the context for the Home/School Connections.

For Teachers: For help in setting up and using Class Pages, use the Walk-through Videos on FOSSweb: <https://www.fossweb.com/fossweb-walkthrough-videos>

Visit the Home/School Connection for each module you teach, select the specific assignments that will be most relevant to your students at this point in instruction. Communicate with families about which content you are assigning through the Class Pages Notes on FOSSweb or through any other established parent communication channel your school has in place.

Tech support on FOSSweb: <https://www.fossweb.com/contact-us#jotform>

Together we will continue to make progress in science teaching and learning during school closures. Now, more than ever, we appreciate the role that science plays in our lives, and how important it is for citizens of all ages to understand and act based on scientific evidence.

Sincerely, The FOSS Team at the Lawrence Hall of Science

HOME/SCHOOL CONNECTION—WEEK 1, A

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Investigation 1: Exploring Air

Here are things to do at home with this first investigation.

Look at the Home School Connection for Investigation 1. (Download the PDF in English or Spanish and, if possible, print the appropriate teacher master.)

Students look at home for toys that use air in some way, or to invent one of their own. Some examples of air toys include gliders, air rockets, parachutes, kites, balls, and air cannons. Students draw a picture of the toy, explain how air makes it work. They should share their explanation with someone in the family.

Look at the two Math Extensions for Investigation 1. (Download the PDF in English or Spanish and if possible, print the appropriate teacher masters.)

Math Problem A summary: A graph show numbers of air-powered toys in a class museum. Students complete questions about the graph, as well as addition and subtraction sentences related to the graph.

Notes on the problem. If students are unfamiliar with math sentences, help them read the graph to find the numbers of toys and fill in the missing numbers.

Math Problems B summary: A teacher wants to set up a learning center. She has four basins full of water. Four students can work at each basin. The teacher has 22 students in her class. Will all the students be able to work at the center at the same time?

Notes on the problem. Students might draw a picture of the four basins, place symbols for students at each basin, and count the number of students. Others might write a number sentence, such as $4 + 4 + 4 + 4 = 16$. Remind students to answer the question asked (they need to compare 16 to 22 to find that not the students can work at the center at one time). In addition, ask students how many more basins a teacher would need in order to have all students working at the same time.

HOME/SCHOOL CONNECTION—WEEK 1, B

Read "What Is All around Us?" in FOSS Science Resources: Air and Weather ebook

To access the interactive ebook, login to FOSSweb with the user name and password provided by your teacher.

Introduce the title, "What Is All around Us?" Ask your child to guess the answer to the title without looking ahead in the reading.

Once your child agrees it is air that is all around us, let them preview the text by looking at and discussing the photographs. Ask students what other questions they think the text will answer about air and wind.

Read the first page and then pause to let your child answer, "Air!" Read the first sentence on the next page, "We cannot see air, but we know it is there." Pause and ask if they agree with the author, and to explain why or why not.

Continue reading aloud or let your child read to you.

Explain that the purpose of this reading is to explain how we know that air is all around us. Tell them to look back through the pages to identify where the author gave reasons to support this idea. You might ask,

- What does the reading tell us about where air is?
- How do you know air is there?
- What other evidence do we have that air is all around us?
- What is wind?
- Is air important to humans and other animals?

Extension activity:

Inflate a ball: Get a beach ball or other inflatable ball. Try inflating it with different amounts of air and testing how the ball bounces each time.