Friday, February 24th, 6-8 p.m.

Fallsmead Science Fair

Science Fair Prep Nights

Come talk to a few scientists if you need ideas or help to get started

Wednesday, January 18th at 6 p.m. in the teacher's lounge

Thursday, January 26th at 6 p.m. in the teacher's lounge

It is time to get energized for SCIENCE!

Fallsmead Falcons are Fabulous Scientists!

Getting started:

It's easy to get started. Your project can be as simple or as complex as you like. First you need to- just ask a question! Find an interesting question or topic you want to explore. Remember to ask a question that you can answer by doing an experiment or survey. Look at the following for some ideas:

- Do plants need water to grow?
- What happens to brownies if you leave out different ingredients?
- How do differences in surfaces affect the adhesion of tape?
- Are all potato chips equally greasy (you can crush them to get uniform samples and look at the diameter of a grease spot on a brown bag)?
- If you shake up different kinds or brands of soft drinks (e.g., carbonated), will they all spew the same amount when opened?
- Does light change the rates at which foods spoil?

Note, this is the only notice about the Science Fair that will be sent home. However, reminders will be emailed via the PTA and all of the information contained in this packet will be available online at www.fallsmeadpta.org

Questions? Contact Celeste Nelson

cnelsonNP@gmail.com or **sciencefair@fallsmeadpta.org**

Friday, February 24th, 6-8 p.m.

Science Fair Entry Form

Please have your parent/guardian sign this form and return it to your teacher by Wednesday, February 15th so that your name and project will appear in the program.

Student Name(s): _____

Teacher:_____ Grade:_____

(CHECK ONE)

☐ **I plan on entering a project but have not decided exactly what to do. I will turn in or email my title by Feb. 15 to be included in the program.**

☐ **I have chosen my project. The title or topic of my project is below:**

I am aware that my child will be participating in the Science Fair.

***Parent /Guardian name/signature:* _____**

The Science Fair needs volunteers – please help!

Volunteer Name(s): _____

Email (for further communication): _____ (please print)

☐ **Table Set-up** We need 3 or 4 people to help set up between 4:30 and 5:30 p.m.

☐ **Visiting Scientist** We need ~12 "scientists" to talk to students about their projects and hand out awards between 6:00 and 8:00 p.m.

☐ **Clean up** We need 2 or 3 people to help clean up between 8 and 8:30 p.m.

How to prepare for the Science Fair

If you follow our suggestions, you will complete your science fair project on time without having to rush through it. Here are the steps:

WEEK ONE: January 23rd – 29th

Get a ***notebook*** – good scientists write down everything they find out. Start with writing your ***Research Question*** or ***Topic*** in your notebook. What are you going to study? What is the Question you are trying to answer?

Go to the library or the media center and look up ***Background Information*** about your topic (you can also use the internet to do a search). Read the information and write important ideas in your notebook. Print out or copy pictures, graphs, or photos from your research sources. This background information will help you understand your project. It should be included on your poster display.

Write down your ***Hypothesis*** – your prediction of what results you think you'll see when you do your experiment. Make sure that your hypothesis matches your experiment and makes scientific sense! Your background research will help you make a reasonable guess about what should happen and why.

WEEK TWO: January 30th – February 5th

Materials List – Make a list of things you need to do your experiment or demonstration. This list is called your **Materials**. Write them down in your notebook. Now, collect all the things that you need to do your experiment or demonstration.

Procedure – If you are doing an experiment or survey, you should start it this week. Plan what you need to do *step by step.* For inventions, figure out the steps it will take to build your invention. Write down your procedure or plan in your notebook. This is your ***experimental procedure.***

NOW, TO THE LAB!!! It's time to try your experiment or demonstration to see what happens! Write down **everything** that happens. This is your **data**. Record observations, take pictures or take measurements. If you are doing a survey, begin asking questions to different people. To show that your results are not just an accident, try to repeat your experiment or demonstration several times. If you are doing a survey or testing behavior, get enough test subjects or observations to make sure you've discovered the trend. Are your data or observations all the same or are they different?

Don't be upset if your experiment or demonstration doesn't work the first time! Scientists usually repeat an experiment many times. You may need to change your procedure if it doesn't work. Discuss it with an adult, write the changes down in your notebook and try it again!

WEEK 3: February 6th – 12th

If you are doing an experiment, continue to take **data.** Write notes about your observations, record measurements, or take pictures. Record everything in your notebook. **Here are the parts of your project to work on this week:**

Results –The **results** are where you show your data and observations, and do any analysis to figure out trends. If your data is written in numbers (such as weights or temperatures), you can make graphs, bar charts or tables to explain your data. You can also draw pictures or show photos to explain your data.

Conclusions – Think about what your data and your results mean. Write down what you think the answer is to your research question. This is called the **conclusion.** What scientific process or principle was involved in making your experiment, demonstration, or invention work? Did your conclusion and hypothesis agree? They may, or may not – it doesn't matter – either way a good scientist will learn something new!

WEEKS 4 & 5: February 13th – 23rd

Poster Display – Start writing each section of your report using the information you recorded in your notebook, and begin making your display. Include the following sections: **title, background** information if needed, **hypothesis** or **question** to be answered, **materials** and/or **procedures, results** (with data), and **conclusions**. You can cut and use the section titles at the end of this document or create your own! As you plan your display, remember you can also use graphs, tables, photographs, or drawings. Don't forget to put your **name** and **grade** on your display. If it is a group project, be sure to list everyone!

Practice at home explaining your Science Fair project to members of your family (or the goldfish). At the Science Fair, you will explain your project to a Visiting Scientist! If your experiment is easy to do, please run it at the science fair. Try to bring all of your equipment and materials to display at the science fair. Please keep in mind the following:

- Displays should be less than 48 inches wide and stand by itself
- You can buy a 3 paneled 36"x48" display board at a craft store, Staples, or Office Depot for about $7 or make your own by taping stiff poster board together
- Safety first – no open flames, poisons, or dangerous chemicals
- No live animals

- No bacterial, viral, or fungal cultures permitted
- Running water will not be available for projects. If the project involves liquids, try to seal everything carefully so there won't be any spillage. Please use a drip pan and have paper towels available to wipe up any spills that might occur.
- Electricity will not be available for projects. Batteries may be used but are to be provided by the exhibitor.
- Avoid using valuable or treasured equipment since it can be misplaced or disturbed

Friday, February 24th….today is the Science Fair!!!!

The science fair is 6:00 pm until 8:00 pm on Friday, February 24th. Please do not bring your projects with you to school in the morning. There is no place to store them in the classrooms and the gymnasium will be in use during the day. You can bring the projects when you return to school for the science fair. **Setup** begins at **5:30 pm** with the science fair beginning promptly at 6:00 pm

When you arrive, tables will be set up in the gym and the surrounding hallways to accommodate all of the projects. If you turned in your permission form, a space with your name on it will be reserved for your project.

Please **stand by your poster** beginning at 6:00 pm. Visiting Scientists will come to talk with you about your project and give you a special award for participating. Once you have discussed your project with the Visiting Scientist, you may then walk around and look at other projects. However, always keep a close eye on your project….other visiting scientists, parents, or students may stop by your poster and want you to explain your project. If not looking at another poster, please remain by your poster for the entire science fair.

All projects must be cleared out of the gym by 8:30 p.m. Thank you!

See you at the Science Fair!
Mrs. Celeste Nelson, Science Fair Coordinator
cnelsonnp@gmail.com

Title

Background

Hypothesis

Procedure

Results

Conclusions