

November 20, 2013

Dear Parents of Travis Heights Students:

This packet is coming home to let you know the requirements for this year's Travis Heights Elementary Science Fair. We will be using the same standards as the Austin Energy Science Festival guidelines. We will need some parent representatives from our school to serve as **judges** and **volunteers** at the Austin Energy Festival in February, so if you are interested in serving, please contact Mrs. Penney at [tonya.penney@austinisd.org](mailto:tonya.penney@austinisd.org), or by calling 841-0864 after school. There will be a training required for these positions, and we can give you further information about the dates and time for that when you contact me. Your child's teacher may add their own requirements to your child's packet, but the general timeline for this year's Science Fair at Travis Heights is as follows:

**November 20, 6:00pm -7:00pm:** 1<sup>st</sup> Science Fair training for parents and teachers of 3<sup>rd</sup> – 5<sup>th</sup> grade students, as well as interested parents of pre-K through 2<sup>nd</sup> grade.

**December 4<sup>th</sup>, Wednesday:** Packets go home to all students in Wed. folders. Parents need to look over them with students as they choose their idea. ([www.sciencebuddies.org](http://www.sciencebuddies.org) and [www.sciencefest.org](http://www.sciencefest.org) have some ideas)

**December to January:** Projects should be underway; data gathering is taking place and conclusions are being made.

**January 15 , 6:00pm -7:00pm:** 2<sup>nd</sup> Science Fair training for parents and teachers of 3<sup>rd</sup> – 5<sup>th</sup> grade students, as well as interested parents of pre-K through 2<sup>nd</sup> grade.

**January 23rd, Thursday: Travis Heights Science Fair Day!**

- **The science fair will be open for display from 9:00am -10:30am for classes to observe.**
- **NO ONE WILL BE ADMITTED DURING JUDGING 11:00am -5:30pm, on Thursday (no exceptions!)**
- **The Travis Heights Science Fair will be OPEN for parents, teachers, and students to visit from 5:30pm – 6:30pm.**
- **Awards Ceremony: 6:45pm -7:00pm**
- **7:00pm: Take projects home and help take down tables after ceremony. (We will need a crew to do this. Please contact your child's teachers if you are interested in helping.)**

**February 22<sup>nd</sup>, Saturday, Austin Regional Science Fair, Palmer Events Center**

Students whose projects are chosen to go on to the Austin Regional Energy Science Festival will need to bring them back to school in early February or arrange to have them delivered to the Palmer Events Center on the afternoon of Friday, February 21<sup>st</sup> for check in. The Austin Energy Science Festival will be open on Saturday, February 22nd, with judging from 8:30a.am to 1:30 p.m. An awards ceremony will be held 3:00pm – 4:30pm on that day. If your child's project is selected to go to the regional fair, you will be receiving more specific information closer to the time of the fair.

For any questions, ask your classroom teacher or email Mrs. Penney. Thank you in advance for all of your hard work.

## Types of Science Fair Projects

### **For Collection: Recommended for K-2:**

1. Remember to write a journal entry every time you do any work on your project. List the date and how much time you worked for each entry. Be sure to take pictures as you go along that can be used for your "Journal" or on your project board.
2. Choose items that you already have or can get easily. These items must be similar enough to be called a collection, but different enough to be put into different categories.
3. Begin background research by taking notes from books, websites, or articles that talk about your subject. These will be your "References". You will know you have completed your research when you can discuss your topic in your own words for about 5 minutes.
4. Once research is completed, begin organizing all the information into paragraphs. This will be the "Background Research" that you'll put on your project board.
5. Define categories based on physical properties, species type, or where it was found. Physical properties are things like color, weight, or shape. Make sure you have at least 2 samples for each category. Also make sure you clearly identify the categories. This is the "Classification Scheme."
6. Decide if you will have your collection attached to the board or in front of it on the table.
7. Don't forget to include "Acknowledgements" on your project board. (Names of the people who helped you with your project and how they helped)
8. Pay close attention to the layout of the project board. The order of information should make sense and be visually interesting. Be sure to include all the required elements, photos and log book. As a last step, add a creative "Title". Be sure to list the person who took the photos under "Acknowledgements" on your board.

### **For Demonstration/Model-Recommended for K-2:**

1. Remember to write a journal entry every time you do any work on your project. List the date and how much time you worked in each entry. Be sure to take pictures as you go that can be used in your "Journal" or on your project board.
2. Decide if you want to construct a model. Be sure to leave enough time for this, since some models can take a lot of time to create.
3. If you don't make a model, decide what you'll use instead, such as photographs, drawings, or objects from home.

4. Begin background research by taking notes from books, websites or articles that talk about your subject. These will be your "References". You will know you have completed your research when you can discuss your topic in your own words for about 5 minutes.
5. Once research is completed, begin organizing all the information into paragraphs. This will be the "Background/Research" section that you'll put on your project board.
6. You'll also need to have a "Written Explanation" section on your board, in which you explain what your project is about.
7. Create a section called "Conclusions" in which you talk about what you have learned and what you could have improved upon in your model.
8. Don't forget to include "Acknowledgements" on your project board. (Names of the people who helped with your project and how they helped)
9. Pay close attention to the layout on the project board. The order of information should make sense and be visually interesting. Be sure to include all the required elements, photos and a log book. As a last step, add a creative "Title" and be sure to list the person who took the photos under "Acknowledgements".
10. Be sure you understand and are able to talk about what you've learned from your project. Practice presenting to an adult.

#### **For an Experiment – Required for 3-5**

1. Remember to write a journal entry every time you do any work on your project. List the date and how much time you worked for each entry. Be sure to take pictures as you go along that can be used for your "Journal" or on your project board.
2. You will need to identify the problem. The "Problem" is the question that your experiment is trying to answer. **The question must be something that you're trying to test.**
3. Formulate a "Hypothesis". A hypothesis is a guess of what you think will happen when you test your experiment.
4. Find the "Definitions" of any important words that are written in your "Problem" or "Hypothesis."
5. Begin background research by taking notes from books, websites or articles that talk about your subject. These will be your "References". You will know you have completed your research when you can discuss your topic in your own words for about 5 minutes.
6. Once research is completed, begin organizing all the information into paragraphs. This will be the "Background/Research" section that you'll put on your project board.
7. Make a list of the "Materials" that you will need to conduct your experiment.

8. Write up your "Procedure," or the steps that you will follow when doing your experiment. Be detailed so that someone reading your project board could perform your experiment using just your instructions.
9. An experiment must consist of 2 groups. One group is the "Control" and the other is the "Variable". Both groups are identical, except for one specific element. The "Variable" is the specific element that is different; it is the very thing that you are trying to test. (An example might be to test a stain remover. The stained garments, your washing technique and your drying technique would be exactly the same for both groups, with one exception. In the Variable group, you would use a stain remover. In the Control Group, you would *not* use the stain remover.)
10. Use a timeline to plan how long it will take you to complete your experiment and create a project board. If you need live subjects (people, plants or animals), be sure to allow enough time. (Remember plants will take time to grow.)
11. Perform your experiment. Record the "Results" which tells what happened. Remember a good experiment will have results that you can clearly measure. Use a chart and /or graph to clearly show your results on the project board.
12. After you find "Results," form a "Conclusion" paragraph which answers the questions in the "Problem" and talks about what happened in your experiment. Be sure to include ways to improve your experiment were you to redo it in the future.
13. Don't forget to include "Acknowledgements" on your project board. (Names of the people who helped you with your project and how they helped)
14. Pay close attention to the layout of the project board. The order of information should make sense and be visually interesting. Be sure to include all the required elements, photos and a log book. As a last step, add a creative "Title".
15. Be sure you understand and are able to talk about what you've learned from your project. Practice presenting to an adult.