

# Wilchester Elementary 2018 Science Fair Class Project Guide, Grades 1-3

## Welcome to all 2018 Science Fair Class Volunteers in Grades 1-3!

In grades 1-3, each class will complete a project and each grade will vote to select a winning class. As the parent volunteer, you will be choosing a project, coordinating with the teacher, and going to the classroom to 1) complete the project 2) construct the poster board and make a short video. If your class is the winning class for your grade, you might also need to assist the teacher when the students attend the higher grade award ceremony. This year all kids in 1<sup>st</sup> -3<sup>rd</sup> grade will participate in the popsicle party to celebrate science achievement.

## Steps

### *Sometime in December or early January, but no later than January 5<sup>th</sup>:*

1. **Contact your teacher via email.** We will provide a draft email for your convenience. Let the teacher know you are the science fair parent. In this email, ask the teacher for 2 times/dates that you can come into the class in January or early February. Ask your teacher if she would like to participate in selecting a project. Ask your teacher if there are any materials she may have in her class to help complete your class project. Ask your teacher to assign tasks among the students.
2. **Please pick a project to complete with your class.** Make sure the project is age appropriate for your class. Ideas can be found online:  
<http://www.education.com/science-fair/>  
<http://www.1000sciencefairprojects.com>

### *Sometime in January or early February:*

3. **First meeting with your class: Do the project.** Go through each of the next steps, and explain in terms they will understand. Tell students what tasks they do. Then do the project. Take some pictures during the project, or assign a child to do so.
4. **The next meeting with your class – Lead the class to complete the poster and video.** Bring the printed photos for the poster. Each student should complete a task in making the poster and/or video. A poster and a short video should be completed. The poster should be hung in the hallway in the grade area. And the video should be submitted to Science Fair Chairs.

# Components of a Poster

The posters will be provided to you by Science Fair chairs. Each poster should contain the following. You can also use these steps in the video.

- **Title** – This is the name of your project. It will appear at the top center of your poster.
- **Problem** – The problem must be stated in question form. What question are you trying to answer? A good format for the question is “What is the effect of this or that?” Examples: Which type of material absorbs the largest volume of liquid: soil, gravel or sand?”
- **Hypothesis** - Explain this statement to your class in simple terms. It is a little confusing to the younger ages (makes it fun). Using complete sentences, explain what you think the answer to your problem question is. It is okay for you to be wrong here. A hypothesis is a statement about the relationship between two or more variables that we set out to prove or disprove in our research.
- **Materials** – List all the materials and equipment used in your science project, *and be specific*. Example: 6 slices of white bread, 4 clean glass baby food jars, measuring spoons, etc.
- **Pictures** – Grades 1-3 are allowed to take pictures of their class completing the project. Take a few photos in the 1<sup>st</sup> meeting in class and put them at the bottom of your poster.
- **Procedure** - This is a step-by-step set of directions on how you did the experiment. Numbering each step will make it easier for everyone to understand what you did. Someone should be able to recreate your experiment from the materials and the procedure you list on the poster.
- **Observations** - Collect data by observing and measuring your respond variables. Ask the class, what they see. Explain that everyone may see the outcome differently.
- **Conclusion** – Re-answer the problem question using what you learned from your observations. This statement is important because it shows that you learned something from your experience.

## Reminders

1. No experiments that can cause danger to someone.
2. No animals or insects can be involved in your project.
3. Posters will be provided to you. The poster does NOT need to look perfect! We encourage students' involvement and originality.
4. We encourage using everyday goods for experiments, if your project requires additional supplies you may ask class parents or provide them yourselves.
5. Work together with your class to go through each step to complete the project. Each student has a task in the process!

## Awards

Each grade will have a winning class and all the classes will have a popsicle party together to celebrate. The Winning classes will also be invited to attend the higher-grade award ceremony and donut party. Contact the teacher to see if she needs you to be there to help.

Thank you for volunteering! Contact us with any questions!

*2018 Science Fair Chairs:*

*Irina Gibson*

*Elizabeth Lovering*

*Linda Hui*

# 2018 WCE Science Fair 1<sup>st</sup>-3<sup>rd</sup> Grade Timeline

1. **Tuesday, December 12** - Volunteer Parent Information Meeting for 1st-3rd grade volunteer parents
2. **Friday, January 5<sup>th</sup>** By this date, Science Fair volunteer parent should have communicated with the teacher and decided on the project, time/date to come to class twice.
3. **January or Early February** Volunteer parents work with teacher and class on completing the class project
4. **Friday, February 16<sup>th</sup>** Deadline for volunteer parents to finish class project, finish the poster, and finish the class science project video clip and send the video back to science fair chairs. As the poster is complete, it can be posted in the hallway in the grade level area.
5. **Week of February 19<sup>th</sup>** Each classroom teacher shows the five/six video clips per grade, and collects the votes of the class on the other class projects, and send the final vote counts to science fair chairs by Thursday February 22<sup>nd</sup>
6. **Friday, February 23<sup>rd</sup>** Winning classes announced and posters remain on display in hallway until end of the day
7. **TBD week of February 26** All classes attend a popsicle party to celebrate science!



## SCIENCE FAIR IDEA STARTERS

Okay, this is the hardest part of the whole project...picking your topic. But here are some ideas to get you started. Even if you don't like any, they may inspire you to come up with one of your own. Remember, check all project ideas with your teacher and parents, and don't do any project that would hurt or scare people or animals. Good luck!

- Does music affect on animal behavior?
- Does the color of food or drinks affect whether or not we like them?
- Where are the most germs in your school?
- Does music have an affect on plant growth?
- Which kind of food do dogs (or any animal) prefer best?
- Which paper towel brand is the strongest?
- What is the best way to keep an ice cube from melting?
- What level of salt works best to hatch brine shrimp?
- Can the food we eat affect our heart rate?
- How effective are child-proof containers and locks.
- Can background noise levels affect how well we concentrate?
- Does acid rain affect the growth of aquatic plants?
- What is the best way to keep cut flowers fresh the longest?
- Does the color of light used on plants affect how well they grow?
- What plant fertilizer works best?
- Does the color of a room affect human behavior?
- Do athletic students have better lung capacity?
- What brand of battery lasts the longest?
- Does the type of potting soil used in planting affect how fast the plant grows?
- What type of food allow mold to grow the fastest?
- Does having worms in soil help plants grow faster?
- Can plants grow in pots if they are sideways or upside down?
- Does the color of hair affect how much static electricity it can carry? (test with balloons)
- How much weight can the surface tension of water hold?
- Can some people really read someone else's thoughts?
- Which soda decays fallen out teeth the most?
- What light brightness makes plants grow the best?
- Does the color of birdseed affect how much birds will eat it?
- Do natural or chemical fertilizers work best?
- Can mice learn? (you can pick any animal)
- Can people tell artificial smells from real ones?
- What brands of bubble gum produce the biggest bubbles?
- Does age affect human reaction times?
- What is the effect of salt on the boiling temperature of water?
- Does shoe design really affect an athlete's jumping height?
- What type of grass seed grows the fastest?
- Can animals see in the dark better than humans?

Didn't see one you like? Don't worry...look over them again and see if they give you an idea for your own project that will work for you. Remember, find something that interests you, and have fun with it.