

Elementary STEM Fair Parent Guide

Science, **T**echnology, **E**ngineering, and **M**athematics

Providing an opportunity for students to utilize science knowledge and skills as scientists do in the real world

WHY a STEM Fair: Providing students opportunities to make meaningful connections to the real world is critical as we develop the skills, behaviors, and dispositions necessary for college, career, and life readiness. Developing a S.T.E.M (Science, Technology, Engineering, and Mathematics) Fair investigation will provide students the opportunity to use science knowledge and skills just as scientists do in the real world. The STEM Fair will provide opportunities to engage in connecting these college, career, and life skills in many ways such as writing clearly, communicating information effectively, collecting and interpreting data, using evidence to justify their thinking, managing time, and providing opportunities to ask "why" leading to the development of an experiment or designing of a solution/innovation.

Supporting your Child with STEM Fair

Parents play a critical role in supporting their child throughout the STEM Fair process. Here are just a few suggestions to help support the STEM Fair experience at home:

- Be interesting, encouraging, and positive
- Supervise and use resources that ensure the SAFETY of both your child and tested organisms.
- Try to ask questions rather than give answers:
 - Questions help place responsibility on your child.
 - Questions help explore the dimensions of the problem.
 - Questions draw solutions from your child.
 - Questions communicate trust and confidence.
 - Questions help develop your child's thinking and problem solving skills.
- Sample Guiding Questions:
 - · Why?
 - How do you know that?
 - What do you want to happen?
 - What would happen if...?
 - What other things could you try?
- Explain or assist in finding resources to explain concepts that are difficult to understand.

Thank you in advance for supporting your child throughout this experience. If you should have additional questions, please do not hesitate to contact:

Susan McKenna, Senior Instructional Specialist

Office for Teaching and Learning

smckenna@pasco.k12.fl.us

Research Plan and Project Log or Journal

Throughout their learning experience your child will be collecting evidence as they develop, refine, and reflect on their thinking.

Your child has been provided with a Research Plan and Investigation Form booklet which provides clarification and guidance throughout their investigations. As engineers and scientists it is critical to organize and communicate information in a detailed way. In most cases your child may need to keep an additional project log or journal to assist in communicating their investigative research, steps, changes in thinking, conclusions, data collected etc. Project logs could include dates and notes of everything that is done and read in connection to the investigation.

> Science Safety and Regulations located on the back.