The STEMite Zone Fair

Parents' & Teachers' Guide


Finding a Fair Project

Nurturing Curiosity and Creativity

Curiosity lies at the heart of every child. They wonder, they question, and they're constantly trying to understand the world around them. **This fair is about harnessing that natural curiosity and turning it into a tangible project**. Remember, it doesn't have to be overly complex. Sometimes, the most impactful projects emerge from everyday observations and questions!

Every question and every observation offers a learning opportunity – it's about the **process**, the **creativity**, the **questions**, and the journey. Encourage the students to embrace both their curious and creative sides!
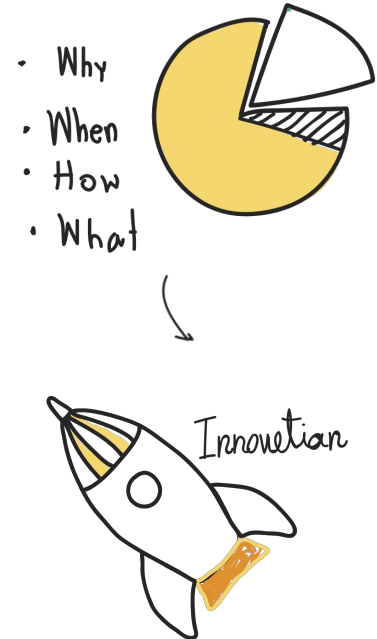
Broadening the Horizon

Though we're grounded in **STEM** (Science, Technology, Engineering, and Mathematics), we understand that every discipline interacts. Hence, projects can even **explore the social sciences, examining the human element within the realm of STEM**. This offers an opportunity to present projects that not only exhibit scientific curiosity but also **human empathy and understanding**.

The 3 Types of Projects

You will notice in the drop-down list when the students are about to submit their proposals on the website that there are **three (3) options** for the kind of project they did. These include:

Experimental projects

Study or **Discovery projects**

Innovative/Innovation projects.

The following is a breakdown of what this means. With this, you can start providing guidance on what project they would like to embark on earlier on.

Experimental Projects

These involve conducting a hands-on experiment. They ask a specific question, create a hypothesis, and test that hypothesis.

🎨 **Design:** Identify a specific question, form a hypothesis, and design experiments to test that hypothesis.

💡 **Tip:** Often, the best experiments come from everyday wonders – *"Why does toast always land butter side down?"*

Study or Discovery Projects

Here, students will study or observe situations to understand the why or how of a phenomenon. This could range from observing animal behaviors to studying the effect of video games on sleep patterns.

🎨 **Design:** Choose a phenomenon or behavior, form a question around it, and study it in depth.

💡 **Tip:** This could range from observing star patterns to understanding cultural practices in their community.

Innovation Projects

For those who love to build or design, this is their playground. Here, students identify a problem, design a solution, build a prototype, and then test its effectiveness.

🎨 **Design:** Identify a common problem, brainstorm solutions, create a prototype, and test its efficacy.

💡 **Tip:** Challenges like *"Can you design a tool to make watering plants easier?"* can spark imaginative solutions.

Project Discovery and Execution

a) Starting Simple

Encourage students to look around them. Often, inspiration can be found in **daily routines, hobbies, or even chores**.

b) Asking the Right Questions

To help students discover their project, **ask open-ended questions**:

- What have you always wondered about?
- Is there something you observed and want to understand why or how it happens?
- Have you seen a problem in our community you'd like to solve?

c) Logging the Journey

Emphasize the **significance of maintaining a logbook**. This isn't just a place to jot down data but also thoughts, observations, and learning moments. From day one, every idea, every failure, and every **'Aha!'** moment should find its space in this logbook. This will be a key item we will be looking out for at the fair for higher points - how detailed and complete the student's logbook is!

d) Be the Guide, Not the Doer

Your role is to be a sounding board, a guide. **Let the student lead, make mistakes, and learn. The journey is as important as the end result.**

Sample Questions to Ignite Inspiration ⚡

1 **"Is there a task at home you wish could be made easier?"**

2 **"Is there a game you play and wonder if it affects your reaction time?"**

3 **"Is there something that our community lacks, and you think you can design a solution for it?"**

4 "Have you ever wondered how plants know which way to grow?"

5 "Did you ever stop to think why some foods taste sour and others sweet?"

6 Recall a story or news you heard recently. Was there a question it left unanswered for you?"

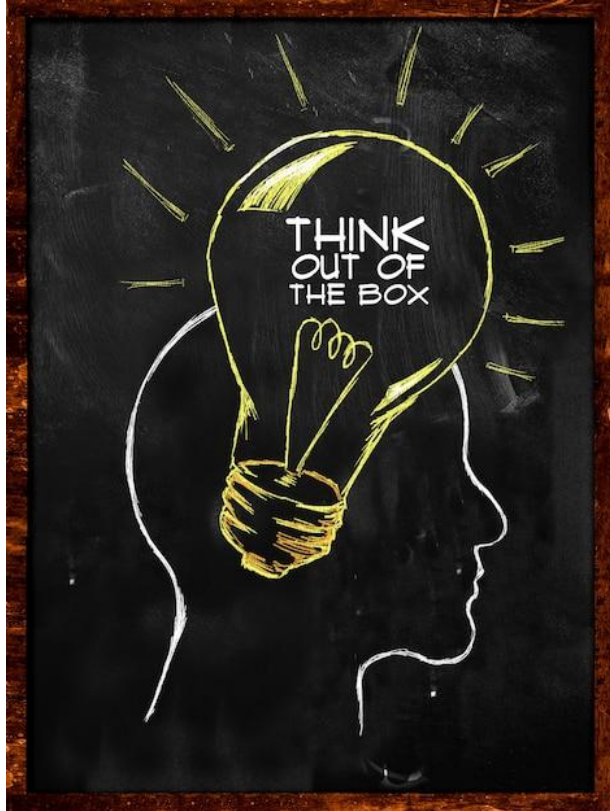**7** What's a device or tool you wish existed, even if it sounds like science fiction?

8 Think about your hobbies. Is there something you'd like to improve or understand better about them?

9 What's something you observed in nature or your community that made you wonder "Why" or "How"?

The Creative Twist:
Beyond the Norm

While the **core of their project lies in research and results**, the presentation can be a palette of creativity. From expressing findings through a song, showcasing their results in an art form, to creating an interactive presentation, the sky's the limit! At The STEMite Zone, **we believe in fostering not just logical but also creative thinkers.**

The STEMite
Zone Fair

The STEMite Zone has successfully run annual programs, including virtual STEM programs for kids of African descent in Canada and Nigeria (2021) and an in-person STEM workshop in Lagos (2022).
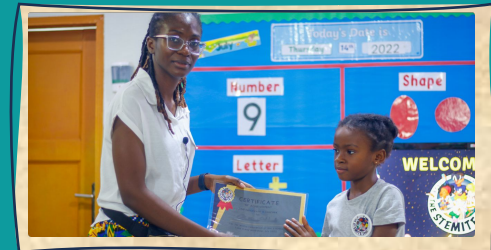
The Journey Beyond the Fair

Remember, the STEMite Zone Fair isn't just about the projects. It's about **nurturing a mindset of inquiry, resilience, and creativity**. It's about nurturing a **lifetime love of learning**. The skills the students acquire, the challenges they overcome, and the curiosity they harness will equip them for challenges beyond the fair. **Let's make this journey memorable, creative, and uniquely their own.**

Need **More Guidance?**
We are **Here for You!**

We've got great resources on our website.

For any questions or additional support, reach out to The STEMite Zone team:

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