**Educator Toolkit Letter to Parents

*Customize this document by adding in your information***

Dear Parents and Guardians,

I am excited to announce that your child will be participating in an invention education program this year. Invention education is a creative and engaging way of learning that encourages students to use their imagination, curiosity, and problem-solving skills to invent solutions to real-world challenges.

As your student’s teacher, I am thrilled to facilitate their involvement in this innovative and engaging initiative. Your child is very excited about becoming an inventor! Your child’s invention should come from a problem they are passionate about solving. We will explore problems in our world, community, and everyday lives.

An invention is something that never existed before, or a new feature on a product that already exists. We encourage our inventors to collaborate with peers and adults when coming up with their idea, when building the prototype, and when practicing their presentation. Thinking of an idea for an invention is the absolute hardest part of inventing. It requires collaboration, observation, and reflection. Thank you for helping your young inventor by being a sounding board for invention ideas. Please write to me with any questions or concerns.

**What is Invention Education?**

Invention Education is designed to inspire creativity, critical thinking, and problem-solving skills among students of all ages. Through hands-on activities and projects, students will explore the process of invention, from brainstorming problems they are passionate about solving to prototyping and testing their creations. This program aligns with our school's commitment to providing a well-rounded education that prepares students for success in the 21st century.

**What Will Your Child Be Doing?**

During the program, your child will:

* Engage in brainstorming sessions to generate ideas for inventions. In these sessions, they will identify problems or needs that they want to solve with their invention.
* Brainstorm solutions to these problems and research existing inventions.
* Select the best idea and plan how to build it.
* Build prototypes of their inventions using a variety of materials and tools.
* Test and refine their prototypes through experimentation and iteration.
* Present their inventions to classmates and potentially to a wider audience.

**How Can Parents Help?**

As parents, your support and involvement are essential to the success of your child's invention process. Here are some ways you can help:

* We encourage you to communicate with your child throughout the invention process. Your child may begin to ask about the problems you face or problems you see around the world in the news. Share problems you encounter throughout your day.
* Encourage your child to speak with family members and friends and record their learning in a journal. This is a great way to start coming up with ideas for solutions.
* Your inventor will keep a journal of their process. Check in with your inventor about their journal. They might need practice and reminders to write in their logbook.
* Inventors need to collaborate with others to succeed. This is a project where students need help from others to build the best invention they can. Their ideas are the foundation of their invention, but they need guidance from peers and adults to iterate upon their initial thinking. That is what invention is all about!
* Help gather materials and resources for your child's invention projects. Everyone has a recycling bucket. Consider donating items you were thinking of recycling or donating to charity to your inventor’s classroom. Inventors need cardboard. Consider bringing cardboard boxes (shipping, cereal boxes, etc) to the classroom.
* Does the company you work for support STEM programs? We are searching for funds to sustain our invention program. If your company might help us, please reach out so that we might be connected to them.
* Attend school events or presentations where your child will showcase their inventions and share their learning experiences.

**Materials**

Soon, your child will begin to build a prototype. Students should begin to look around their house now for possible building materials. They can place items in an invention box to gather it in one place.

If you have materials at home that you would like to donate to our supply collection, please let me know. We welcome families helping us stock our invention supply “closet”.

Look in your recycling bin before putting it out for collection – practically anything in there could be used by some inventor!

* Cardboard of any kind (Amazon boxes, cereal boxes, food boxes)
* Soda bottles of any size (for plastic)
* Fabric, felt
* Buttons
* Velcro
* Tape
* Cardboard rolls (toilet paper and paper towels)
* Toothpicks (families usually have way more than they need)
* Aluminum foil
* Popsicle sticks (especially when the warmer weather comes)
* Coffee filters
* Plastic cups and straws from fast food trips
* Old Tupperware containers or containers from ordering out
* LEGO bricks, old connecting toys, wooden blocks they do not use in the family anymore
* Paper clips of all sizes
* Binder clips of all sizes
* Yarn and string
* Batteries
* PVC piping
* Old electronic devices that no one uses – their parts could be repurposed

**Donating your time**

Invention is collaborative. These young inventors will need the expertise of adults and peers every step of the way. You do not need to be an engineer to give great feedback to our inventors. Our inventors will need help exploring their ideas, making improvements to their initial models, building their prototypes, and receiving user feedback. Please let me know if you or anyone you know would like to spend time in our classroom (whether in-person or virtually) and provide your ideas and feedback to these young inventors.

**Timelines and Deadlines**

Please stay tuned for further information regarding the schedule of activities and important dates for our program. [INSERT TIMELINE AND DEADLINE INFORMATION]

Invention education is important because it helps students develop 21st century skills such as creativity, critical thinking, collaboration, and communication. It also fosters a growth mindset, a sense of agency, and a passion for learning. Invention education aligns with educational standards and integrates STEM, literacy, and other subjects in a meaningful and authentic way. We are excited about the opportunities that the Invention Education Program will offer your child and look forward to their active participation. If you have any questions or concerns, please feel free to contact me at [Your Contact Information].

Thank you for your continued support.

Sincerely,

[Your Name]

[Your Title/Position]

[Your Contact Information]