



Invention Convention

Inventor – a person who makes something using the imagination

Today you will be an inventor!

Maybe you have invented something before? This time you will invent something by combining 2-3 everyday items (modern inventions) together into 1 new, exciting invention! Along the way you will need to complete an **Inventor's Summary** and create a **Model** of your invention.

The **Inventor's Summary** shows your creativity and what you have learned about writing from your teacher. It is weighed heavily in the judges' scores. It must include:

- 1) a description of the problem that was the reason for the invention; and
- 2) a description of how the invention works and solves the problem.

You must also include a **Model** of your invention to display at the class Convention. The model ***does not*** have to work but must show how the invention ***would*** work if the model was real. Models must fit easily on the top of your desk. Backboards – Science fair project boards – or other presentation materials are ***not*** allowed. Models must be completed and set-up on your desk by the end of the day **Thursday, May 23rd**.

The **Inventor's Summary** must be ***with*** your **Model** for the judges to score at the Convention.

Here are your steps for this project:

1. Identify a Problem

2. Problem-Solve a Solution

3. Develop the Invention

4. Explain your Invention

1. What is the Problem?

Think about some things that went wrong for you yesterday or even today. What could have helped to prevent that from happening? Would it had been easier if you had something that would have fixed the problem?

Brainstorm some ideas... (*Think:* I wish I had a _____ that would _____)

2. Solve the Problem!

Now that you've come up with a problem, think about what – if such a thing existed – could be useful in solving your problem. This is the hard part. What could help you? Here are some questions to ask yourself:

- * If I could have used something to fix the problem, what would it look like?
- * What things around me right now – at school or at home – could I use as part of the way to solve my problem?

Here is an example...

Problem: The other day I was doing my homework. I started to get hot from working so hard! I wish I had a way to cool myself off. I usually only have my pencil and my homework with me. I do my homework in lots of different places: in my room, waiting for the bus, at after-care, in the car, or at a friend's house. What could make my problem go away no matter where I choose to do my homework?

Solve the Problem: I have my pencil with me all the time. A fan is the most helpful to cool me. I am going to attach a small motorized fan to the end of my pencil to keep me cool while I work.

Now that I have the solution, I need to make sure I think of anything that could cause another problem. What happens to my fan when I run out of pencil lead? How will I use the eraser and the fan at the same time? What power source will be used to run the fan? These problems will impact how you design your invention.

3. Let's Build!

Once you have chosen your idea it is time to start designing YOUR invention. You should take your time and plan before you start building your **Model**. Start by figuring out the PIECES and PARTS you will need to actually make it. You will need to think about what it will look like, how you will use it, does it need directions for someone to use it – all the things that will help others know what your invention is all about!

Here are a few questions to answer to get you started:

- * Is it like anything that already exists? AVOID this!
- * How is your idea different or unique?
- * What can you name it?
- * How will it be used?
- * Who will use it?
- * What will it look like? Try sketching it or talking it out with a family member.
- * How does it work?
- * When would it be used? Night or day? Warm weather or cold?
- * Does your invention need directions or instructions? Write them down.
- * What materials will you need to build?

Let's start with the PIECES and PARTS. What 2 (or possibly 3) objects that are currently around you every day could be combined together to make your invention?

For example, *The Fancil*

Item #1: *a pencil* (this is an invention that can be a PART of my invention!)

Item #2: *a small fan* (this is an invention that can be a PART of my invention!)

Now that you've figure out the PARTS to your invention you are ready to build. A few things to remember:

- * It does NOT have to be a working model.

* You will NOT buy anything for this project! You should be using materials you have around the house or in the classroom.

Your **Inventor's Summary** should be written IN COMPLETE SENTENCES at home or at school on the provided worksheet. Do NOT put your name on the front of your Inventor's Summary – write it on the back. Make sure you have the **NAME** of your invention on the front of your Inventor's Summary at the top. Your **Model** can be built at home or at school – depending on your teacher's directions. Your teacher, classmates, and family can help you by listening to your ideas – but this is YOUR invention. You should make the decisions for what it is, how you can build it, and what materials you will use. You might get frustrated when something doesn't work the first time, but stick with it...

"I have not failed. I've just found 10,000 ways that won't work."

- Thomas Edison (inventor of the light bulb)

* Judging will be on Thursday, May 23, 2019. Inventions will be judged on the **Model** and the **Inventor's Summary**.

* Each class will have a 1st, 2nd, and 3rd place winner. These inventions will then compete for overall 1st, 2nd, and 3rd place in the Fourth Grade.

* ALL winners will be announced at the Awards Ceremony on Tuesday, May 28th.

What is the problem? _____

How does the invention solve the problem? _____
