

July 2020-September 2020



Your holiday project is to become an imaginary inventor. Is there something in life that you or others find frustrating or annoying? Can you think of a solution to the problem? Now is your chance to become in an inventor!

Below are some tips on the process involved in inventing something new. It will give you some ideas about how to go about inventing a new product.

Coming Up With An Idea!

Identify a problem worth solving. The very first step in any inventing process is to identify the problem that your invention will solve. Look at the world around you and ask yourself: What could work better? What task could be done better or faster? What annoys you and how could you fix it?

- Ask friends or family about daily problems they face and record their feedback.
- The problem doesn't need to be new and the device doesn't need to be new. Even if lots designs for a particular device exist, you're still inventing something if you make a new design to do the same thing in a different way.
- Be creative with your ideas. Not every idea will be a great one, but don't be afraid to 'think outside the box'.



Brainstorm Ideas

- Try making a list of all the things that interest you. These could be hobbies, jobs, or products that you use regularly.
- Figure out the problem that you may be having in a few products. Add that to your brainstorm list.
- For each activity or item of interest to you, make a list of possible improvements that could be made in the form of an invention. This could include variations of the product or activity or useful add-ons.
- Keep a journal with you at all times, to constantly add new items to your possible-invention list.

Here's some ideas from other children:

<https://www.littleinventors.org/>

<https://www.boredpanda.com/kids-inventions-turned-into-reality-inventors-project-dominic-wilcox/>

Of course, feel free to use these or other searches online to help inspire your ideas!

Decide On An Idea!



Once you've spent some time considering all possible options, choose your best idea for an invention. Now you'll have to spend time considering the details of the project. Draw a few sketches of what you imagine your invention will look like, and then annotate your sketches with labels and notes. Consider some important questions:

- What could you add to improve this product? What about your invention is so special that people will feel compelled to bring it into their lives? Why is your invention so great?
- Think about changes that might need to be made.
- Consider all aspects of your invention including all the required parts, and important details about how it works or what it will do. Keep these answers and ideas in your journal so you can refer back to them.

Building Your Invention!

Gather the necessary materials to build a prototype. A prototype is usually a working model of your idea. It will likely not be a very polished version, but will prove the concept behind the idea itself. Of course, your model might not be a working model, but it will give you and others an idea of what the product will look like.

- Make a list of everything you'll need and how much of it is necessary.
- Look around your home for recycled materials that you may be able to use. This will be much more cost effective and you will also be reusing materials.
- If you need any special tools for construction, ask your parents if they have them or if they know anyone who might have access to them.

Build the prototype of your idea. Once you have all the materials you need and the necessary supervision for construction, you can build your prototype.

- You may find that while building the prototype you have to change the design a bit. This is all part of the inventing process. Jot down in your journal or annotate your sketches about changes you made and why you had to make them.
- Always have an adult or older sibling around while you are inventing. They know how to use the tools and will be a huge help.
- Wear old clothes you don't care about to avoid getting paint and glue all over good clothes.



Marketing Your Invention!

Present and advertise your invention. Now your invention is becoming a reality, it is time to imagine you were trying to get your product out into the world.

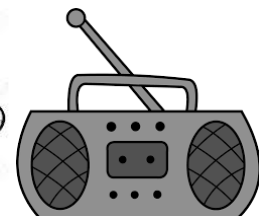
How would you get an investor to put money into your business? Have you watched Dragon's Den? (<https://www.radiotimes.com/news/2016-01-13/cbbc-is-making-a-kids-version-of-dragons-den/>)

Think about how you would 'sell' your idea. This could be through a presentation where you discuss the inventing 'journey' you have been on.

How will you make people want to buy your invention?

You could:

- Create a newspaper/magazine/online advert for your product
- Create a poster to advertise your product
- Make a TV advert - you could even film this!
- Make a radio advert - this could include a jingle.



When you create your advertisement, think about:

- Who would you like to buy your product? Why?
- Why would someone benefit from buying your product? How will it make their lives

better?

- How much does it cost?
- Where can they buy it from?
- How will people remember your advert? Make it eye-catching and memorable.
- How will you persuade people to think that they NEED your product!

How can you present your invention when we come back to school in September?

I would like you to share your project with the rest of Panther Class when we return to school. I am hoping for some wonderfully creative ideas. Ideally, I would like you to talk through your designing process.

It really is up to you how you present your project, but I do expect you to present something!



It could involve any of the following:

- Share your brainstorming ideas (your journal)
- Discuss how your invention is a solution to a problem
- Show and talk about your model (prototype)
- Share any adverts you have made (this might be on paper or made electronically). These could be shared on the Visualiser or on the SmartBoard.
- You could imagine you are on Dragon's Den and 'pitch' your idea to us!

I look forward to seeing your fantastic projects in September!