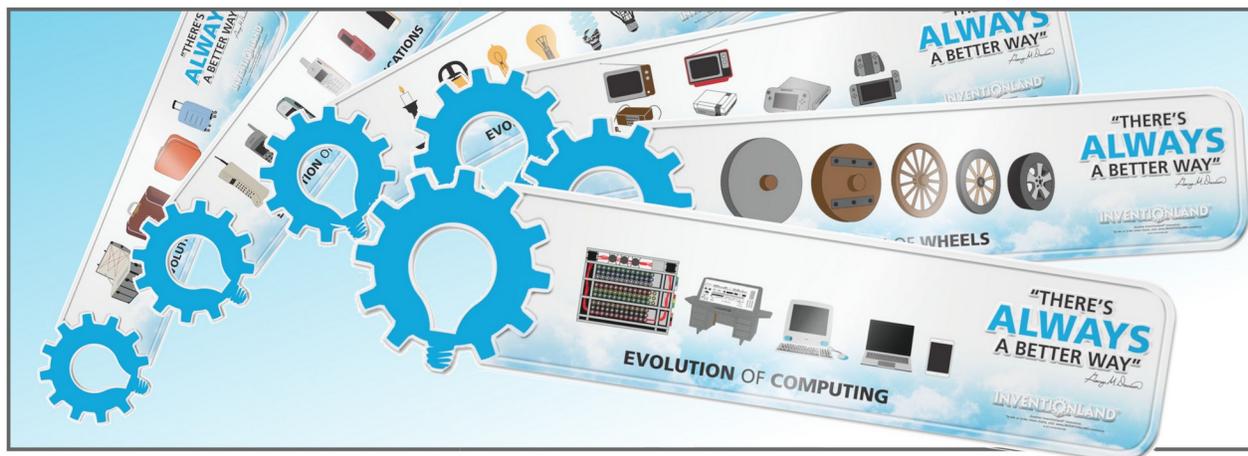


Build-A-Better Way Challenge



Introduction

Technology doesn't just appear from nowhere. Every new thing that exists comes from previous discoveries. In that sense inventions are not created; they evolve. Whether it's the [wheel](#), the [tablet computer](#), the [light bulb](#), or the [video game](#), everything has a history of development that stems from someone looking at something and deciding that there has to be "a better way."

The image above shows an assortment of inspirational Inventionland signs that champion the evolution of technology. In this challenge you get to create your own evolution of technology timeline all about something that you are interested in. Research your chosen item to learn what products preceded it, pick the ones that you feel are most noteworthy, and place them in a timeline from past to present.

Materials

- Index cards, paper, poster board, or cardboard
- Glue, Hot Glue, and/ or tape
- Pens, pencils, markers, or other writing or coloring utensils

The Challenge

STEP ONE: Choose your subject.

Pick an object that you are familiar with and interested in. Here are some suggestions:

- A piece of equipment from your favorite sport.
- A favorite game or toy from your childhood.
- An interesting family heirloom or antique.
- A common, useful item that most people take for granted.
- A unique piece of technology or software that you use every day.

(Seriously?! You want to choose your cell phone?)

Come on! You can be more original than that!

Build-A-Better Way Challenge

STEP TWO: Research your subject.

Look up articles and information about your subject. Find out the following information:

- What other versions of your subject came before the modern version?
- What did people use to perform your subject's function before your subject existed?

These earlier versions and things people used in the past are your "points of evolution".

STEP THREE: Choose your timeline points.

Select at least 4 points of evolution in addition to your original subject. For each point, answer the following questions:

1. What is it?
2. What is its purpose?
3. When was it created?
4. How is it better than what people used before it existed?

For each point of evolution, write the answers to the questions above on a separate index card or small piece of paper.

STEP FOUR: Have something to show.

For each "point of evolution" you will need to show what it is you are referring to. There are several options:

- Collect samples. If you can, find examples of the actual objects from your points of evolution, or perhaps small replicas to represent the items.
- Build your own models of the items from your points of evolution. Even a simple cardboard model, clay sculpture, or piece of carved insulation foam can be an excellent representation of a 3 dimensional object.
- Collect pictures of the items from your points of evolution. These can be copied from books or magazines, or printed from articles found online. You can even flex your artist muscles and create drawings of the objects.

STEP FIVE: Put it all together.

- On a large piece of paper, poster board, or cardboard, draw a line with one end representing the earliest date in the evolution of your subject and the last point representing present day.
- Add the dates of your "points of evolution" to the line in order from oldest to newest.
- Attach the index cards or small pieces of paper from step three to the board as close as you can to their corresponding date. Add lines or arrows to connect the cards to their date along the timeline.
- Add the drawings, images, models or items from step four next to the information cards on the board.

STEP SIX: Present your timeline.

Take photos or record a video of your timeline and send them to your teacher. If using photos, write out the information along the timeline to ensure your teacher knows what each point says. If taking a video be sure to explain each point along the timeline and why you believe it to be relevant to the evolution of the final item.

Build-A-Better Way Challenge

Additional information

Remember that research doesn't always have to be done on the internet. Old books and magazines are a great place to find information about things that used to be "modern technology".

Don't be afraid to talk to people. Reaching out to an older family member or someone who has experience with the item you are researching can provide insight you will never find online.

This challenge can be very simple or very elaborate. It all depends on the subject you choose and how detailed you are in your execution of the steps.

Lessons Learned

The Build-A-Better Way Challenge offers a host of educational opportunities.

It starts by leading students to discover the historical influences that lead to the things they are most familiar with today.

Students are required to research their items and encouraged to go beyond simply looking things up online. By providing specific questions to be answered for each point in the timeline, students are forced to target their research. By doing this they learn not just to gather information, but to comprehend the information enough to find specific answers.

Students are given the opportunity to come up with creative solutions representing the objects they researched. They will need to critically evaluate what resources they have at their disposal such as time, technology, materials, and skills. Then will then choose the best method based on those resources as well as their own ingenuity and determination.

Finally, assembling the many elements of the challenge is a logical exercise that strengthens both organizational skills as well as visual communications. The act of presenting their work, either through written words and photos or by way of live video, requires organized logical preparation and effective communication.