



Grades 2-7

# Women Inventors

Learning Lapbook™ with Study Guide



*M. Curie*

A Journey Through Learning  
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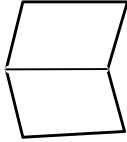
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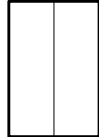
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## Things to Know

**Hamburger Fold**-Fold horizontally



**Hotdog Fold**- Fold vertically



**Folds**- Labeled with a small line to show where the fold is and the words hamburger fold or hotdog fold.

**Dotted Lines**-These are the cutting lines

**Cover Labels**- Most of the booklets that are folded look nicer with a label on top instead of just a blank space. They will be labeled "covered page" or "cover label."

### So where do the mini-booklets go?

A color coded and labeled KEY is included. This key shows you where all of the mini-booklets go in each folder. Keep this page handy! You'll also see at the top of the mini-booklet pages another graphic that shows once again where to place the booklet in each folder. So there are TWO ways to see where to place the booklet. We made it easy!! You won't get lost.

### How do I use the study guide and mini-booklets?

Read the study guide page to your child or if your child is reading, let him/her read it to you. After each study guide page, you will find the mini-booklet pattern that goes with that study guide page (Occasionally, a study guide page might have more than one mini-booklet). Cut out, construct and glue the mini-booklet into the lapbook (The directions for cut out, assembly and placement will be found on the same page as the mini-book pattern). Then fill in the answers. Most of the answers for the mini-booklets can be found within the study guide. Further research on the study guide topic can be done if desired.

## How Long Does it Take to Complete the Lapbook?

Doing a study guide page and mini-booklet a day, a 3-folder lapbook takes about one month to complete. However, you can expand the study portion and make it last as long as you like! That's the beauty of homeschooling! Do it YOUR way!

## Study Choices

Choice #1- Read the first page of the study guide. Then use the internet and fun children's books to learn more about the topic that is covered in that study guide. For instance-our American Indians lapbook has a study guide page about Geronimo. Dig into Geronimo. There are probably lots of interesting things to learn about him that the study guide does not cover. Spend a day on Geronimo or spend a week! The pace you take for the lapbook is completely up to you. When your child has completed studying that particular topic, it will be time to do the mini-booklet for that topic. The mini-booklet patterns are found right after the study guide page that it goes with. Or, your child might want to do the mini-booklet before he/she delves deeper into the subject. Once again, the order is completely up to you and your child.

Choice #2- Read only the study guide page and do the mini-booklet that goes with it. The mini-booklet patterns are found right after the study guide page that it goes with. You may choose to do one study guide/mini-booklet per day, two per day, two per week, three per week, etc. It doesn't matter. The pace is completely up to you. At one per day, it will take about a month to complete a 3 folder lapbook.

## Lapbook Assembly Choices

Choice #1 -Do not glue your folders together until you have completely finished all three folders. It is easier to work with one folder instead of two or three glued together. You can keep the waiting folders in your binder that we will be mentioning later.

Choice #2 -Glue all of your folders together before beginning. Some children like to see the entire project as it is being done. Plus, it helps with keeping up with which folder you are supposed to be working in. The choices are completely up to you and your child!

## Tips and tricks to go the extra mile!

### Supplies Need:

½ inch three-ring binder

5 tabs (if you are using our copywork and/or notebooking pages, you will need to have 7 tabs. Label with copywork and notebooking)

Quart size baggies

Duct tape

Your study guide and mini-booklets pages

Office supplies-glue, scissors, brads, stapler, pencils, crayons, and ribbon (if needed)

1. Label your tabs: Study Guide, Book Log, NICK Biography Reports, Outlines (Copywork and Notebooking, if using these).
2. Make copies of NICK notes and outline forms and put them behind the tabs. Your child can use either the NICK notes form (easier) or the outline form (a bit harder) after any of the study guides. These serve as a good review of the material in the study guide.
3. Hole punch your study guide and mini-booklets sheets and place behind the Study Guide tab. You will need a page of a study guide. Behind the study guide are all of the booklets that go with that study guide.
4. Keeping your office supplies handy-Measure the bottom of a quart size zip-lock bag. Then measure out a strip of duct tape that length. Lay the zip-lock bag on the lower edge of the tape. Fold the other end of the tape down on the zip-lock bag. Your duct tape should be sticking out from the bag. Now, you can hole punch the duct tape strip. **DO NOT HOLE PUNCH INTO THE BAG!** Then put it into your 3-ring binder. Use this bag to store items you will be using for your lapbook. Glue, scissors, hole puncher, stapler and extra staples, crayons, pencils, brads, ribbon, and any unfinished work. Doing this one step keeps you from having to constantly gather supplies every time you want to work on your lapbook!

Folder 1

<p>We've Come A Long Way</p>	<p>What is A Patent?</p>	<p>Mary Phelps Jacob</p>
<p>Virginia Apgar</p>	<p>Amanda Jones</p>	<p>Marie Curie</p>
	<p>Harriet Tubman</p>	

Folder 2

<p>Ann Moore</p>	<p>Sybilla Masters</p>	<p>Bette Graham</p>
<p>Marion Donovan</p>	<p>That's Interesting!</p>	<p>Ruth Handler</p>

Women have made great contributions to society through their inventions and discoveries! One such woman was Virginia Apgar. She came up with a quick way to test a newborn's immediate health right after delivery. Draw a newborn on the table. Draw the nurse's stethoscope around her neck and maybe a shelf up above the bed that stores baby things and more medical equipment. Be creative! Cut off this piece and glue the scene to the front cover of your closed lapbook.

# Women Inventors



## We've Come A Long Way!

During the early 1800's, women had very few rights or opportunities compared to modern women of today. Women were not allowed to work, earn money, hold a license, write a contract, or even file a lawsuit. If a woman were to invent an item, she could not claim it as her own. The common thinking among society was that "women were not smart," therefore, whatever she invented would have been patented in her husband's name. He would have the sole rights to the invention and earn any money the invention made.

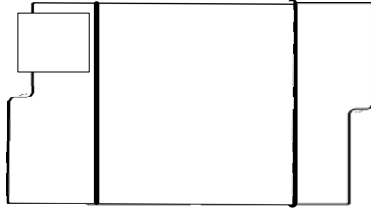
As the 19th century began, so did the new women's movement. Women gained a bigger voice and began using it. They started with legislation that changed women's status as property holders. At the women's rights movement at the Seneca Falls Convention in 1848, they voiced their concerns about equality in educational opportunities, property and voting rights, and in society as a whole.

Slowly, times began to change. A change in property rights laws did help with an increase in patents issued to women for their inventions. Exhibition buildings featuring inventions by women were seen at the 1876 Centennial Exposition in Philadelphia and the 1893 Columbian Exposition in Chicago. Yes, opportunities and recognition were finally being given to women. Women indeed showed that they were more than capable of coming up with new ideas and concepts as you will see in this study of women inventors!





**Folder 1**



Cut out big booklet and fold sides inward. Cut out and glue cover label on top of closed booklet. Cut cover label down the middle so that booklet will open. Glue booklet into lapbook. Read **We've Come Long Way**. Answer the questions.

Cover label



Fold in

Fold in

What would happen when a woman invented something?	Describe how life for women used to be?	How have times changed for women?

## What is a Patent?

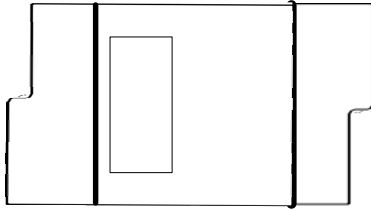
A patent is a set of specialized rights that is granted by a state to an inventor for a set period of time in exchange for a disclosure of an invention. Patents and their requirements vary greatly between countries.

To obtain a patent, the application must include a paper defining the invention. All inventions must be a new, inventive, and useful or industrially applicable. The point of a patent is to prevent anyone else from making, using, selling, offering to sell, or importing the invention.

The word patent comes from the Latin word *patere*, which means, "to lay open." It also means to make available for public inspection. The length of a patent is usually for a 20 years from the filing date. The rights of a patent are similar to that of owning any other property; it may be sold, mortgaged, and even transferred to another person.



**Folder 1**



Cut out the booklet and glue into lapbook. Read **What is a Patent?** Write about what a patent is in your best handwriting!

**What is a Patent?**

**SAMPLE PAGE**

## Virginia Apgar

Virginia Apgar was born in 1909. Virginia was in medical school at a time when women were just starting to enter the world of men. She graduated with a medical degree specializing in infant surgery in 1933. She was one of Columbia University's first female medical doctors. At the time she graduated, she was one of the first American women to specialize in surgery. When she was hired at the Columbia Hospital in 1949, she became the first-ever full Professor of Anesthesiology. Virginia loved children. As she began to work with newborns, it grieved her that there was no set way of determining the immediate health of the new baby. She began writing down the areas that she felt should be checked on with each delivery. Soon, everyone in the hospital was using her system. It became known as the "Apgar." The test is done at one minute and five minutes after birth and sometimes at 10 minutes if the first scores were low. It lets the medical staff know in a quick manner how the baby is doing. APGAR is an acronym for:

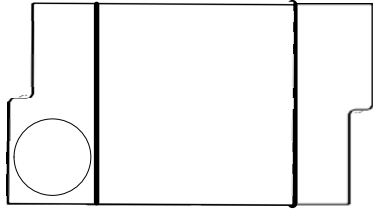
- \*Appearance
- \*Pulse
- \*Grimace
- \*Activity
- \*Respiration



Each of these criteria is given a score of zero to two. The scores are then added up for a possible total of ten. The higher the score, the better the baby is doing.

In 1959, Apgar was appointed the Director of the March of Dimes, and at the same time, she earned a Masters of Public Health degree from the Johns Hopkins University. Apgar never married and died on August 7, 1974, at Columbia-Presbyterian Medical Center.

**Folder 1**



Cut out the 4 circles, stack with title on top and staple at the top or connect with a brad. Glue into lapbook. Read **Virginia Apgar**. Fill in information on each circle about Virginia Apgar.

**Virginia Apgar**



**SAMPLE PAGE**

When was she born? What degrees did she earn?

**SAMPLE PAGE**

Why is the Apgar test is given to newborns?

Explain what the Apgar test is?

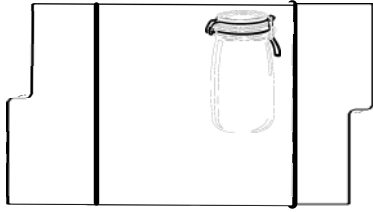
## Amanda Jones

Amanda Jones was born in East Bloomfield, New York, on October 19, 1835. As a child, Amanda spent most of her spare time reading. At the age of 15, she became a teacher. She loved writing poems and in 1860, she published her first work. In 1873, she had a thought about the canning process. She reasoned that she could remove the air from jars by replacing it with jelly or juice. Not only did it add more flavor to the food but it also kept the nutritional value of the food intact. Removing the air also killed the bacteria by lack of oxygen instead of heat. A short time later, she and a friend began a company called "Jones."

Ten years later, she created the first automatic safety burner. That same year she started the Women's Canning and Preserving Company. Amanda would only hire women to work in her factory, stating, "They needed a place." After three years in business, she hired her first group of men to help run the company. Later that year, Amanda lost her business to this same group of men. She died in 1914.



### Folder 1



Hamburger fold on the middle line. Cut out around the shape of the jar. Glue into lapbook with title showing. Read **Amanda Jones**. Inside, write about Amanda Jones.

SAMPLE PAGE

