Paper Scientist
Patch Program
Welcome to the wonderful world of paper science! Did you know that there are paper products all around you? Paper is a part of your life every day – from the books you read to the tissue you might need if you have a runny nose. Paper is a great material because it is renewable and recyclable. New products can be made from old paper, and we keep on growing trees to make more of it.

This patch program is for Girl Scout Juniors, Cadettes, Seniors, and Ambassadors.

The following activities take you on a journey from the forest to the many areas around your town or city that use paper and wood products. More details about each activity, videos, materials lists, and more can be found here:

Complete at least 2 activities at each stop from the forest to manufacturing and complete at least 2 activities from the Take Action section to earn your Paper Scientist Patch.

Here is a short description of the stops on your journey and activities to select from:

**Juniors and Cadettes**

1. **Create a Leaf Art Project** – Design a colorful leaf collage, and learn about the different shapes and part of a leaf.
2. **Create Tree Bark Rubbings** - Learn about the different tree textures and uses for the wood.
3. **Match Game** – Match the animal with the animal tracks found in a healthy forest.
4. **Play detective** - Investigate what is made from wood in your home – you might be surprised!

**Seniors and Ambassadors**

1. **Create a Leaf Art Project** – Design a colorful leaf collage, and learn about the different shapes and part of a leaf. Preserve it in glycerin.
2. **Learn about Different Types of Trees** - Why do certain types of trees grow in certain places? Which trees are used for which products?
3. **Healthy Forest** - Watch interesting videos and learn about what makes a forest healthy.
4. **Interview a forester** – Speak to a professional who makes a living understanding and educating about healthy forests and habitats.
5. **Match Game** – Match the animal with the animal tracks found in a healthy forest.
6. **Play detective** - Investigate what is made from wood in your home – you might be surprised!
**Juniors and Cadettes**

1. **Recycling Interview** – Interview a grown-up about recycling, and tell a friend what you learned.

2. **Recycling Symbol Scavenger Hunt** – How many recycling symbols can you find in your house? Learn what they mean.

3. **Local Recycling Rules** - Learn about the recycling rules in your community and become an expert at what is recyclable and what is not.

4. **What’s Up with Cup** – Learn why certain cups are recyclable and why some are not. Be a paper cup detective – tear it apart and see what you learn!

**Seniors and Ambassadors**

1. **Research** – What does recycling really mean? Write a story about what you learned or have fun filming a video.

2. **Learn about Household Composting** – What is household composting and how does it work? Do some of your own composting!

3. **Local Recycling Rules** - Learn about the recycling rules in your community and become an expert at what is recyclable and what is not.

4. **What’s Up with Cup** – Learn why certain cups are recyclable and why some are not. Be a paper cup detective – tear it apart and see what you learn!

**Juniors, Cadettes, Seniors, and Ambassadors**

1. **Paper Scavenger Hunt** – Find as many items made of paper in your home as you can in 30 minutes.

2. **Trash to Treasure** – Build a robot or a piece of art out of paper items you would recycle.

**Juniors, Cadettes, Seniors, and Ambassadors**

1. **Explore a Store** - Explore a grocery or retail store like a true detective. Get a list of items to find and start searching. How many can you find? Learn about different materials and packaging types.

2. **Find a package that doesn’t have a “please recycle” message on it.** Contact the company and ask them to consider adding a logo. Many packages will have a toll free telephone number, email, or mailing address.

**Juniors, Cadettes, Seniors, and Ambassadors**

1. **Learn How Paper is Made** - Watch a few videos, answer some questions, and learn how paper is made.

2. **Make Your Own Paper** – Use items in your home to make paper and see how easy and fun it can be.
Take Action

1. Brainstorm how to use less paper without using more of something else. (ex/ paper towels, grocery bags, paper cups, printer/copier paper, toilet paper). Make a plan to reduce your use of at least one of these things.

2. Monitor your family’s paper towel usage for a week. How many paper towels got used? Who uses the most and how can you use less? Make a plan to reduce your use.

3. Design a better package. Select an item that you think is over-packaged and could use less materials. Explain what you would do differently or select an item that is currently packaged in plastic and think about how you would put the same thing in paper.

4. Perform a skit. Each person should represent a role in the life cycle of paper. Roles may include: Tree farmer, logger, paper company, converter, retailer, consumer, recycler.

5. Find a pen pal and share your thoughts about paper on paper. You and your pen pal should exchange at least two letters or postcards each.

6. Make a poster with images of the different packages you find in your surroundings. Be sure to include a plastic pouch, metal can, and a paper based juice box. Gather your family or friends. Discuss which packaging is best and why. Consider convenience/performance as well as environmental attributes.

Final Steps

Completed at least 2 activities in each section? Congratulations, Paper Scientist! Please:
