

# Intermediate Math & Science Project

This week we are going to be thinking about the properties of an everyday material - paper. We will investigate different ways to transform paper and how it is made.

Walk around to different places in your home. What types of paper can you find? What are the different properties of paper? Record your findings.

Using a piece of paper from your recycling tub, think about how you can change it. Can you cut it, bend it, curl it, fold it, weave it, crunch it, rip it? How can you use some of these techniques to create piece of art that stands up just using paper, scissors and glue or tape?

Paper is made of plant fibres from trees, grasses or leaves. You can make new paper from old paper by cutting or ripping it into little bits and adding hot water to them to start breaking them down. If you have a blender, you can blend the mixture for a few seconds to make a pulp and then spread the pulp out to dry on a baking sheet or in a sieve. Blot or press out as much extra water as you can, let it dry and you will have new paper.

Find a video to watch or a book to read about where paper comes from. Draw a diagram of how paper is made, based on what you have learned. Do you think paper is a sustainable material? Explain your thinking.

Use a square of paper to engage in the Japanese art form of notan - expanding the square. In notan, all pieces of the paper are used and a symmetrical shape is cut out from each side. See the picture here and the weekly overview video for more information.

At the end of the week, put all your project work together on one page to submit to your teacher.

