



Climate Change Manual Olaines 1.vidusskola February 2020

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Experiment carried by the team of Olaines 1.vidusskola on the topic Climate Change. Experiments with papers.

Introduction

Forests have four major roles in climate change: they currently contribute about one-sixth of global carbon emissions when cleared, overused or degraded, they react sensitively to a changing climate; when managed sustainably, they produce woodfuels as a benign alternative to fossil fuels; and finally, they have the potential to absorb about one-tenth of global carbon emissions projected for the first half of this century into their biomass, soils and products and store them - in principle in perpetuity.

The number of trees and other vegetation cut down in order to make paper is enormous. Paper companies insist that they plant as many new trees as they cut down. Environmentallists contend that the new grown trees, so much younger and smaller than what were removed, cannot replace the value of older trees. Efforts to recycle used paper (especially newspapers) have been effective in at least partially mitigating the need for destruction of woodlands, and recycled paper is now an important ingredient in many types of paper production. The chemicals used in paper manufacture, including dyes, inks, bleach and sizing, can also be harmful to the environment when they are released into water supplies and nearby land after use. The industry has, sometimes with government prompting, cleared up a large amount of pollution, and federal requirements now demand pollutionfree paper production. The cost of such clean-up efforts is passed on to the consumer.

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Procedure:

Experiments with papers

Experiment Nr 1. Papers decomposition in the soil.

The goal of the experiment is to find out which paper faster decomposes in the soil (sample of fabric paper, sample of biopaper or sample of paper of secondary recycling)

Equipment for the experiment :

- Samples of papers;
- Markers;
- Scissors;
- Wooden sticks;
- Spoon.

Step 1

Take wooden sticks and with markers and color them

Step 2

Take all 3 samples of papers and cut into squares by scissors

Step 3

Write with markers which paper is which

Orange: Sample of paper of secondary recycling

- Blue: Sample of fabric paper
- Green: Sample of Biopaper

Step 4

Go outside and dig the paper samples and marks with wooden sticks

Step 5

Stay for one month

Step 6

After one month dig out paper samples and write results with conclusions.

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