production of chalks out of seashells



Background of the Study

More people used to collect seashells for fun and for past time. They made decorations, jewelries and even accessories for a doll out of it. But aside from those things, seashell can also made into a much useful thing. We are aware thateducationis the most powerful key for us to succeed. And to support this, we need some facilities and materials for us to make it easier and clearer. Of course, there is already some modernized equipment, but still, for those hopeless countries and people who also want to be sent in school, even a worst facility matters. We already have whiteboards that just need markers and projectors as the most modernized. But still, the origin of those is just a simple blackboard and a piece of chalk. So the researcher will conduct this study to find out if seashells can be used in making a durable chalk.

Statement of the Problem

Almost all commercialized or local products' price is continuously increasing. And this is a big aspect to be considered in schooling. Some of the schools don't have enough support from government and this thing brings difficulties for students.

General Objective

This study primarily aims to find out if seashells can be used in making chalk.

Specific Objective

To determine if seashells are effectiveness of seashells in chalk making.

Hypotheses

- 1. There is significance difference between our product, chalk from sea shells and the leading commercial one.
- 2. There is significance difference between experimental chalk from sea shells and commercial one in terms of quality and durability.

SignificanceoftheStudyThis study opens another way for people to be able to save and make chalksthat is much durable and long-lasting use that will take part in this study.The study was conducted as a remedy for the common problem of spendingmuch in. And it also helps us to gainmoneywhen you make this as yourbusiness affair. We can also make some raw materials that we thought to beuseless, transformed into a much useful and more powered thing.

Scope and Delimitations of the Study

This study is focused on designing and producing alternative chalks. It also deals with the assessment of its actual advantages as compared to some commercialized one.

The qualities and quantities data obtained in the testing of the product against the control were limited to 3 tests only.

Definition of Terms

Seashells- the shell of marine animal and especially a mollusk. (Merriam-Webster Dictionary)

Cassava – also called manioc, yucca, balinghoy, mogo, mandioca, kamoteng kahoy, tapioca-root (predominantly in India) and manioc root, a woody shrub of the Euphorbiaceae (spurge)familynative to South America, is extensively cultivated as an annual crop in tropical and subtropical regions for its edible starchy tuberous root, a major source of carbohydrates. (http://en. wikipedia. org/wiki/Cassava)

Chalk- is a soft, white, porous sedimentary rock, a form of limestone composed of the mineral calcite. (http://en. wikipedia. org/wiki/Chalk)

Review of Related Literature

A seashell is the common name for a hard, protective outer layer, a shell, or in some cases a " test", that was created by a sea creature, a marine organism. The shell is part of the body of a marine animal, in most cases the exoskeleton, usually that of an animal without a backbone, an invertebrate. The word seashell is often used to refer only to the shells of marine mollusks, i. e. mollusk shells, but it can also be used to mean the shells of a wide variety of marine animals from different phyla. For helpful introductory articles, see marine invertebrates and marine biology. Seashells are commonly found in beach drift, natural detritus deposited along strand lines on beaches by the waves and the tides. Shells are very often washed up onto a beach empty and clean, the animal having already died, and the soft parts having rotted away or having been eaten by either predators or scavengers. Empty seashells are often found by beachcombers, and collecting these shells is a harmless hobby or study.

However, the majority of seashells which are offered for sale commercially have been collected alive (often in bulk) and then killed and cleaned, specifically for the commercial trade. This type of exploitation can sometimes have a strong negative impact on the distribution of rarer species, and on local ecosystems. Many other kinds of sea animals have exoskeletons or shells which may, after death, wash up onthe beachand may be picked up by beachcombers; these include remains from species in other invertebrate phyla, such as the molted shells or exuviae of crabs and lobsters, the shells of barnacles, horseshoe crab shells, sea urchin and sand dollar tests, brachiopod shells, and the shells of marine annelid worms in the family Serpulidae, which create calcareous tubes.

Methods and Materials

Tools and Materials

The tools and materials that will be used in this study are seashells, cassava, mortar and pestle, grater, oven toaster, bowl and cloth.

Research Design

General Procedure

First, the researcher will collect sea shells from the sea shore or left-over shell viands, and cassava. After that, the shells will be pulverized until it becomes fine as powder and set aside in a container. The cassava will be grated and squeezed its juice using cloth. Separate the liquid from its residue, mix the residue of the extracted cassava and the pulverized seashells. Add a small amount of water at the right ratio of the quantity of the mixture. Mold the mixture into different shapes and sizes according to your desire. Place it under the sun and wait until it dries up and is ready to be used.