

## **Innovative Ruskinites**

<b>Grade:</b>	4
<b>Locale:</b>	Ruskin/Apollo Beach
<b>When:</b>	1950's
<b>Spark of Interest:</b>	Innovative Ruskanites
<b>Content Areas:</b>	History/Science/Language Arts
<b>Timeframe:</b>	7 forty-five minute lessons hour sessions
<b>Sunshine State Standards:</b>	SS.C.2.2      SS.A.6.2      SC.H.1.2

**Abstract:** Students will combine history and science by learning about one of Paul Dickmans unique innovations, wrapping and preserving vegetables in cellophane. Students will utilize the scientific process to determine the effectiveness of Paul Dickmans preservation techniques.

### **Materials:**

- Innovative Ruskinites Pamphlet
- Science project outline
- Cellophane
- Tomatoes

### **Vocabulary:**

- Cellophane
- Food preservation
- Ruskinites

### **Lesson Outline:**

\*This lesson can be done as a whole class, small groups, or individually depending on students comfort level with the scientific process.

1. Distribute student copies and read the background text and photographs about Paul Dickman's preservation process on Innovative Ruskinites Pamphlet.
2. Inform the students that they will be using the scientific process to determine whether cellophane extends the shelf life of tomatoes much like Paul Dickman would have in developing his business.
3. Distribute science project outline.
4. Guide students through the steps of implementing the project.
5. Display the projects on a science show-board.

### **Extensions:**

1. Apply the scientific process to other investigations.
2. Have students investigate other simple common day innovations frequently taken for granted.

## Innovative Ruskinites Pamphlet

**Paul Dickman, Circa WWI**



Photo Source: [WWW.RuskinHistory.org](http://WWW.RuskinHistory.org)

The Dickman family was one of the original founding settlers in Ruskin. They helped establish the Ruskin College in the early 1900's, built several of the beautiful historic homes still intact today, farmed local land, and founded several prominent businesses such as the Coffee Cup Restaurant formerly located in Ruskin, and the Ruskin Vegetable Corporation still located in Apollo Beach. The family was also prominently involved with significant organizations such as the Commongood Society that lasted until 1967 and the historic Tomato Festival which still continues in the first weekend of May at E. G. Simmons Park.

## **The Coffee Cup Restaurant**



Photo Source: [WWW.RuskinHistory.org](http://WWW.RuskinHistory.org)

## **Ruskin Vegetable Corporation**



Photo Source: [WWW.RuskinHistory.org](http://WWW.RuskinHistory.org)

Paul Dickman was an extremely innovative person. He invented new types of machines for harvesting crops, created new systems of delivering produce, and developed a system of pre-packaging produce for delivery. He was well lauded for many of his creative accomplishments.

Paul Dickman wanted to prevent tomatoes from spoiling so quickly. He therefore developed a system of preserving them by wrapping them in cellophane before delivering them to distant markets. The cellophane wrapping extended the amount of time that tomatoes would remain fresh. This was done by wrapping it around the tomatoes much like grocery stores often do today. Go to the produce section of a local grocery store or market sometime when your family is food shopping. Do any of the fruits or vegetables have a plastic wrap around them? This is the idea that Paul Dickman had!

# Science Project Outline

## 1. Title

Select a topic that can only be answered by testing it. The title should be written as a question.

## 2. Purpose

One – three sentences only. It explains why you are conducting the investigation. Begin by stating “The purpose of this project is.....”

## 3. Hypothesis

This is a statement that expresses what you expect to happen prior to conducting the experiment.

## 4. Procedure:

Three components:

A. Materials. Make a complete list of everything utilized in the experiment. Be specific. Use the metric system.

B. Variables. (All 3).

\**Manipulated*-That which is being changed on purpose.

\**Responding*-The measurable result of what was changed.

\**Constant*-Everything that is kept the same or is controlled throughout the experiment.

C. Step by Step Directions.

List the steps taken in the experiment. Numbering them is helpful. List every step taken in the experiment. Number each step in the proper sequence.

## 5. Data

This is the measurements, written notes, pictures, photographs, drawings, tables, graphs, etc.

## 6. Graphs

Graphs should be organized with the responding Variable on the Y axis and the manipulated variable on the X axis. Be sure to include a title and appropriate labels for each axis.

## 7. Conclusions

Begin with a statement as to whether the results support the hypothesis. Next describe what was observed as a result of the experiment. Be sure to include what was observed that was not expected and what should be done differently next time. Revise the hypothesis if necessary.

8. **Log**

This should include the purpose, hypothesis, procedure, data, graphs, conclusions, and the bibliography. It is a handwritten document of what took place.

9. **Project Display**

If you choose to have the students display their projects on a show board it is recommended that it be no more than 40 cm. deep, 122 cm. open width, and 100 cm. high. It should be a sturdy, lightweight tri-fold.