Corn Packing Peanuts

Grade Level: K-3

Objective: Students will learn about renewable and non-renewable resources, as well as building fine motor skills.

Common Core: Language Arts: CCSS.ELA-Literacy.W.3.1; W.3.7

Next Generation Science Standards:
Structures and Properties of Matter: 2-PS1-1; 2-PS1-3
Engineering Design: K-2.ETS1-1; K-2-ETS1-2

Suggested Reading Materials:
IAITC Corn Ag Mag
Corn Terra Nova
Corn by Gail Gibbons | ISBN: 0823422453

What You Will Need:
- Cornstarch Packing Peanuts

Introduction:
Cornstarch packing peanuts are biodegradable and decompose in water, leaving no toxic waste. Because the peanuts begin to break down in water, the peanuts can be used to construct sculptures and art. Simply "lick and stick."

Cornstarch packing peanuts can be used in a variety of ways in the classroom. Here are a few ideas:

Classroom Activities:
1. Use the packing peanuts as an interest approach. Each student thinks of something different when they hear the word "agriculture." Have your students build something related to agriculture. To make it more interesting, give your students some stipulations, such as:
    - Time Limit—Give your students 10 minutes to construct their idea of agriculture.
    - Height—You are looking for the tallest structure.
    - Sturdiness—Structures should be free-standing. When time is up, have them let go and then measure the tallest structure that can stand on its own.

2. Another interest approach idea: Give students the title of an upcoming reading assignment or book. What does each student think of when they hear that title? What will the book be about? Have each student construct their idea.

3. For young students learning numbers or the alphabet, give them a piece of paper with a number or letter on it. Have them "trace" the number or letter with corn packing peanuts by having them lick and stick them together.

Corn Packing Peanuts:
- www.uline.com
- Search "Cornstarch Peanuts"

The Disappearing Packing Peanut

Observation/Research

- Head to the Soybean station and place one small cup of each type of packing peanut into a larger cup.
- List the characteristic of each type of packing peanut on the sheet provided. Describe each type of peanut in detail.
- List how you think these peanuts are different.
- In today's world many are often very interested in products being biodegradable. In this experiment, we will want to determine which of these peanuts are made from a biodegradable product.

Hypothesis

- Form a TOPIC Sentence and a HYPOTHESIS for this Packing Peanut Project

Experiment

- Head to the WHEAT STATION and get two cups of water. Get the same amount of water in each cup.
- Slowly pour the water into each cup of packing peanuts observe and record the reaction of the packing peanuts to water.

Conclusion

- At the conclusion of the experiment can you reject or accept you Hypothesis?
- Next head to the CORN Station and pick up the Corn Ag Mag, and read page 3 CORN BASED PRODUCTS, FIELD CORN and add what what you think the dissolved peanuts are made from to your Lab Notes.

The Disappearing Packing Peanut

Observe

Hypothesis

Experiment

Conclusion

The Disappearing Packing Peanut

LAB NOTES

OBSERVATIONS:

Packing Peanut A	Packing Peanut B

TOPIC SENTENCE:

HYPOTHESIS:

The Disappearing Packing Peanut

LAB NOTES

EXPERIMENT OBSERVATIONS:

Packing Peanut A	Packing Peanut B

What do you think is the main ingredient in the packing peanut that disappeared?