

Cycle 3 Science Script

Week 5 # 77 Rubbed Off

 Song to the tune of Pop Goes the Weasel 
The Scientific Method is Purpose Hypothesis Materials Procedure (pop!) Results Conclusion

Purpose – To demonstrate how the epidermal cells are rubbed off.

Links to Weeks

#1 - What are four types of tissue? Connective, Epithelial, Muscle, Nerve

#4 – What are four parts of the excretory system? Urinary Tract, Lungs, Skin, Intestines

Introduce Experiment

(Questions)

Has anyone ever cleaned the lint trap on a dryer? **Yes/confused looks** (hold up lint) Where did all this lint come from? **Children give various answers** It came from the cloths that were in the dryer didn't it? All that dryer lint is made up of tiny pieces of fabric that has worn off the cloths from the friction produced as they were bouncing around in the dryer. Did you know that you are like a giant living breathing lint machine? **Ewww, giggles**

(Purpose)

Your body is covered by skin and everyday it sheds old dead skin cells. Today we are going to make a demonstration of what that process looks like.

(Hypothesis)

Wait a minute! Lint I can see but I've never actually seen skin cells! I'm only repeating what I've read in books and heard from other sources....Is it true? Do we actually shed skin cells? How many think that we do/don't? **Show of hands** Did you know it is ok to question even the things we consider to be facts? It's what scientists do and it is the search for those answers that lead to many fun and important discoveries. Every time I go to the Dr. I am very glad that there were people throughout history who asked questions and were diligent to find the answers.

(Materials)

For our demonstration we have just three materials...a bar of soap which will represent our skin some sand paper which will help show how friction can help our skin cells fall off as we go about our day, and colored paper to catch all those skin cells so we can see them.

(Procedure-results)

First hold the bar of soap over the paper. Now gently rub the soap against the sandpaper. What do you see? **Itsy bitsy teenie weenie little pieces of soap.** (note to older parents....any resemblance to a song is merely coincidence) What would happen if we just kept rubbing the soap with the sandpaper? **We would have a pile of soap flakes and no soap!** Huh, if that happened in real life then we would all look like Pig Pen and his ever present dust/dirt pile from the Peanuts comic strip wouldn't we? (hold up picture) **giggles** But that doesn't happen does it? Why?

(Conclusion)

Your skin is the largest organ in your body and is made up of three distinct layers. The outside layer is called the epidermis and every minute of every day you will lose between 30-40 thousand skin cells from your epidermis. Would anyone like to guess how much all those dead skin cells would weigh after a year? Nine pounds! The one key difference between the bar of soap and our skin is that God created our bodies to constantly renew themselves. The outside layer of the epidermis is replaced every 15 to 30 days in a younger person but this process takes a little longer in an older person. Can anybody tell me how this simple constant renewing of our skin shows how thoughtful and caring our Creator is? Let the children give various answers and when they are done say....Just like the cloths we wear our skins provides protection and warmth for us. We need our skin to constantly replace itself or it will wear away (Hold up an old paper thin pillow case, sheet, shirt etc) like this old pillowcase and not be able to properly do its job.