Najah Soudan

Mr. Chainani and Mrs. Malfa

STEM 1B

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Clay Mask

Cost of Each Clay Mask Ingredient and Grams used

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| Item | Grams Used | Cost($) |
| White Sand | .5g | 0.00195 |
| Aloe Vera | 2g | 0.051 |
| Honey | 1.2g | 0.01305 |
| Kaolin Clay | 3g | 0.0252 |
| Distilled Water | 1g | 0.0100 |
| Fuller’s Earth Clay | 2g | 0.0264 |

Procedure:

1. Take a spoon full of white sand and put it in a weight boat and put the weight boat on the electronic balance to check how many grams of white sand there is.
2. Then if there is too much white sand, keep pouring the white sand out and putting the weight boat back on the electronic balance until it says .5 grams and then put the .5 grams of white sand in the mortar.
3. Then get a 10mL pipette and suck in 2mL of Aloe Vera liquid and then release the liquid into the mortar.
4. Put 1 squirt of honey in the mortar.
5. Then take a spoon full of Koalin Clay and put it in the weight boat and then put the weight boat on the electronic balance to check how many grams of Koalin Clay there is.
6. If there is too much Koalin Clay, keep pouring the Koalin Clay out and putting the weight boat on the electronic balance until there it says 3 grams and then pour the 3 grams of Koalin Clay in the mortar.
7. Take another 10mL pipette and suck in 1 mL of distilled water and then release the liquid into the mortar.
8. Then take a spoon full of Fuller’s Earth Clay and put it the weight boat and then put the weight boat on the electronic balance to check how many grams of Fuller’s Earth Clay there is and If there is too much Fuller’s Earth Clay, keep pouring the clay out and putting the weight boat back on the electronic balance until it says 2 grams.
9. Then put the 2 grams on Fuller’s Earth Clay into the mortar
10. Mix all the ingredients in the mortar together with the pestle until the clay is soft and smooth

Justification:

The Clay Mask does fall within the constraints because it is smooth and has the same conspiracy, it absorbs into the skin, it’s easy to wash off leaving no residue, it cleans the pores of the skin, it has a maximum of 6 ingredients, and the cost per gram of the mask is about 1.32 cents which is under 2 cents. The white sand was chosen for the abrasive because the abrasive is important since it lets oil plugs get looser as the clay mask is spread on the skin. The white sand was chosen instead of the flaxseed& soy cereal because it was had a good color and the texture was smoother. The texture of the flaxseed &soy cereal was rough. The Kaolin Clay and Fuller’s Earth Clay were both chosen as the cleansers because they both had a nice color. Also using both of them makes the clay thicker which means the clay mask will hold together more instead of using one of them. The Green Clay was a bad color and therefor was not chosen. Using a cleaner is important because they harden the skin and clean out the pores when it goes from moist to dry. Then for soother that was chosen was Aloe Vera because the Tea Extract makes the Clay mask smell bad. The soother is important to add in because it lessens the irritation and redness of the skin from the abrasive in ingredient or scrubbing the mask. For the preservatives Aloe Vera and Honey were chosen because they stabilize the mask. They prevent the mask from separating and changing form. The Honey also makes the mask nice and thick. Glycerin wasn’t chosen because too much liquid preservatives should be in the masks. Water was used so the mask doesn’t get too thick. The Altoids weren’t used because if too many ingredients were used in the clay mask, then it will be very thick.