Testing the strength of natural polymers – teacher and technician notes

***Education in Chemistry***July 2017[rsc.li/EiC417-medical-plastics](http://rsc.li/EiC417-medical-plastics)

This experiment accompanies the above article ‘Body, heal thyself’

## Apparatus

* Clamp and stand
* Pencil
* Hair and wig samples
* Slotted masses
* Plasticine
* Access to a balance



## Sample results

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sample** | **Colour** | **Human/Synthetic** | **Dyed/Undyed** | **Mass added to break (g)** |
| 1 | Black | Human | Undyed | 90 |
| 2 | Red | Human | Dyed | 168 |
| 3 | Brown | Human | Dyed | 149 |
| 4 | Brown | Human | Undyed | 95 |
| 5 | Blonde | Human | Dyed | 139 |
| Hairpiece | Brown | Synthetic | Dyed | 110 |