

# Mood Rings - Worksheet

By: Louise Lopes

## Introduction:

Mood rings seem magical. They can make a stunning jewellery piece while also showing you your mood, or can they? In this investigation we will explore the colour changes of mood rings and uncover their magical qualities.



## Question:

**Aim:** Your aim for this investigation will be to change the colour of a mood ring without having to change your mood.

Discuss with your class and/or lab group about what you think would be the most likely factor affecting the colour in mood rings.

List these below:

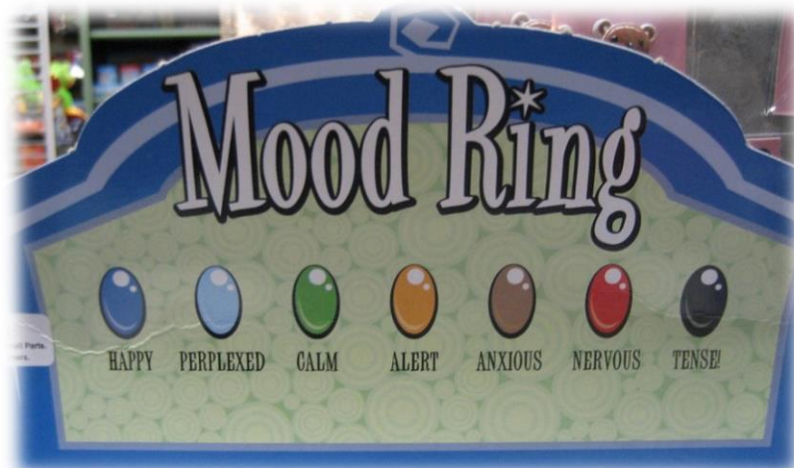
Pick what you think would be the most likely factor that affects the colour in mood rings, and outline your variables below:

Independent Variable: \_\_\_\_\_

Dependent Variable: \_\_\_\_\_

Controlled Variables: \_\_\_\_\_

**Hypothesis:** I predict that when \_\_\_\_\_ is changed, then the colour of the mood ring **will/will not** (circle which one) change.




Plan:

As a group, you will now plan your investigation by writing out what steps you will take. Try to consider how you will control for any confounding factors. Discuss safety considerations with your teacher and provide an additional materials list.

A large, empty rectangular box with a thick black border, intended for students to write out their investigation plan, including steps, control factors, safety considerations, and a materials list.

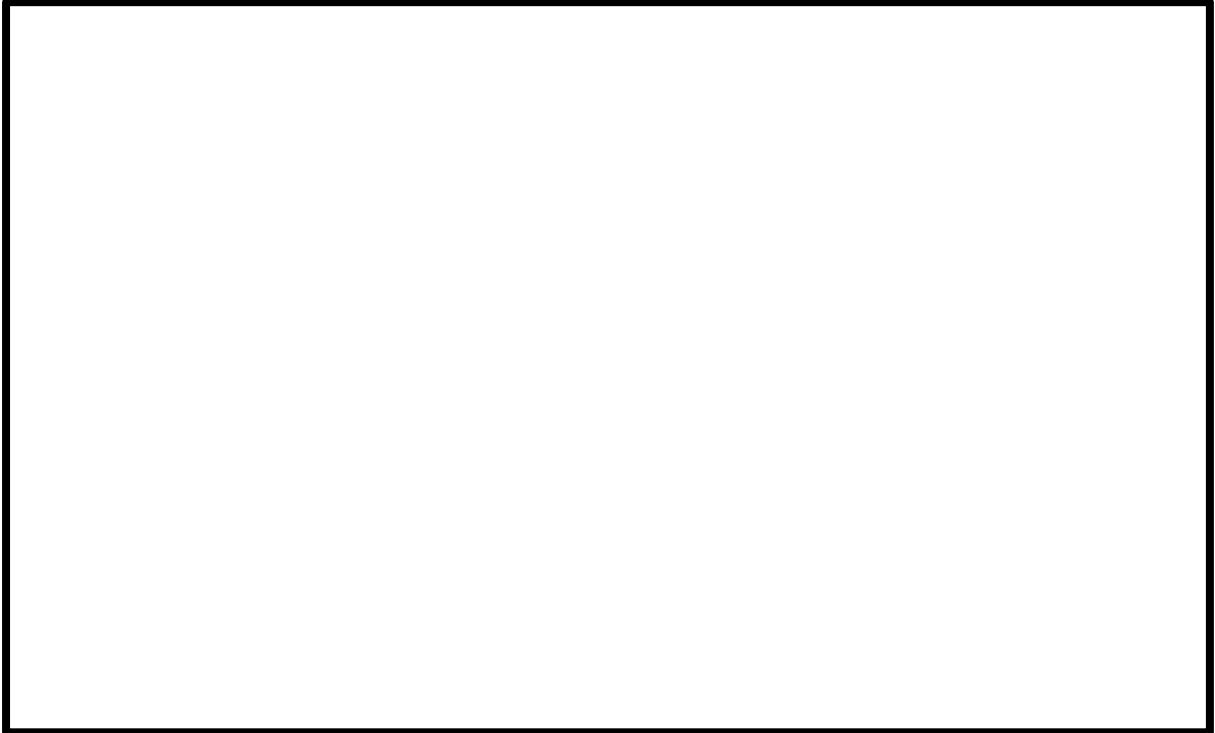
Conduct:

Record your results below:

A large, empty rectangular box with a thick black border, intended for students to record the results of their investigation.

Analyse:

Represent your data graphically in order to present to your class:



Problem-Solves:

**Evaluate:** Look back on your investigation. Were the results of your experiment reliable? Were there any sources of error? How would you improve your investigation? Were there any control variables that were not considered?



**Assess:** Compare and contrast your results with those of the rest of the class. Which lab group demonstrated the clearest relationship between the independent and dependent variables? Can you see any compounding factors?



**Apply:** Use the knowledge you have gained from this investigation, as well as class discussions with your teacher, to explain how mood rings work. What makes them change colour? Is the colour change in a mood ring a physical or chemical change? Can mood rings tell you your mood?



**Conclusion:**

Write a few statements outlining whether your Aim was achieved and whether your hypothesis was correct or not. Use your findings to support your claim.



**References:**

Image 1 - <https://www.flickr.com/photos/perspx/4910076070/in/photolist-8tTqxY-axD3Vo-r2FGg-8MyPdB-XVp7yD-gt8EKc-7eSa5o-9ku3nc-afeRz2-7nKajH-YVV78a-afeQDi-WEDJv1-zKwMDN-WfC6HR-SK6vzy-bcNip4-oHgDd-8jYvHF-8kvuq8-66Lmxt-7rUGed-dCbj2M-67gdLh-cXnx2Y-8i1oJ-PARI-66zUFF-WEDCYj-6JsHNI-74wJ9F-5dDyek-6nt5x5-aWvsBr-XWVpsB-WEDKEf-5kNgr8-XWVqhx-HNG4M1-7n17VC-3tHTfP-55B3Mo-nefW97-c4ALXm-XWVZ2B-MvWCp-5kNgy6-3D2vUa-6LBSGK-XWVoqM>

CC Attribution-NonCommercial 2.0 Generic: <https://creativecommons.org/licenses/by-nc/2.0/>

Image 2 - <https://www.flickr.com/photos/switthoft/417341772/in/photolist-CSZaN-MU4-ovB4Fv-49sDaq-mYhvBH-aFV86-pJVGUw-WBH4RA-BiVhY-RWrHe3-fwhGBp-6wQtTr-afhC5W-9Hzymm-hmgeuv-axAjk4-7DeWZF-axD31A-axD1Yw-axD1Bu-8dsiv4-axAkon-axD2F7-ctxiUj-bK5wwp-8tTqxY-axD3Vo-r2FGg-8MyPdB-XVp7yD-gt8EKc-7eSa5o-9ku3nc-afeRz2-7nKajH-YVV78a-afeQDi-WEDJv1-zKwMDN-WfC6HR-SK6vzy-bcNip4-oHgDd-8jYvHF-8kvuq8-66Lmxt-7rUGed-dCbj2M-67gdLh-cXnx2Y>

CC Attribution 2.0 Generic: <https://creativecommons.org/licenses/by/2.0/>