



Changing Christmas Baubles- Teacher's Notes

Changing Christmas Baubles

Last year, when I hung up my Christmas decorations I used lots of new red glass ball decorations both inside the house and outside over my Christmas tree.



When the time came to take them in I discovered that the balls hung inside the house still looked the same but the ones from the garden had changed. They were different. Almost all colour had gone from the top of the balls (see photograph).

Explain what you think might have caused the change.



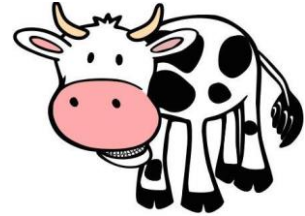
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Sunlight falling on top of the balls had bleached the colour from them or more correctly, energy from the Sun had changed the chemistry of the paint.

Describe an experiment you could use to find out if you were correct.

They would have to create an experiment where one set of decorative balls was kept inside and another set kept outside. Other conditions would have to be kept the same.

To measure any change in colour download the free App "Colour Assist" onto your mobile phone. The camera can be pointed at the top and bottom of the baubles and differences in colour measured to an international standard.



Is this experiment a fair test?

To check if this is a "Fair Test".

Change one thing = Inside and outside.

Measure one thing = Change in colour.

Everything else was kept the same.

