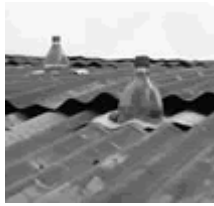


Bottle Soda Light



The Bottle Soda Light acts in a similar way to a skylight.

But there is a difference. Watch the Bottle Soda Light video [Video 1 – <http://www.wimp.com/lightenup>] and then visit a Liter of Light website [Video 2 – <http://isanglitrongliwanag.org>] to see their video or watch it on YouTube [<http://youtu.be/bLg-K97sWxA>]. Based on what you see in the videos and the commentary, compare the two lighting systems. Here are some points to guide you:

1. Water is added to the bottle on insertion into the roof.
2. What purpose does the water play in illuminating the room?
3. The second substance that was added to the bottle in the first video was the element Cerium (pronounced “siriam”). Why was cerium added to the bottle?
4. Research the properties of cerium (element symbol Ce¹) and give your arguments for and against adding Cerium to the water and the effects it may cause.
5. In the second video they suggested adding bleach. Compare the differences between cerium and bleach
6. Is the approach shown in ‘Bottle Solar Light’ and ‘Liter of Light’ a quick fix or an economic fix? Answer in a paragraph or two stating your pros and cons.
7. Create a poster showing the advantages and disadvantages of both types of lighting.
8. Now compare the above bottle light systems to Australia’s sky light systems. Do Australian systems use water or chemicals? Can you suggest a system that could improve the bottle light system and still be as economical?

You might like to watch the following to gather more information.

- The chicken coop bottle sky light - http://youtu.be/1umwvQ_hMHQ
- Hope in a dark home - Soda Bottle light² - <http://youtu.be/bLg-K97sWxA>
- [Australia’s Solatube](#) sky light manufacturer promotion video
- Solatube’s method of installation <http://youtu.be/-caeVADxLGE>

The ‘Liter of Light’ website has worksheets ([pdf format](#)) in English on how to make and assemble a bottle light. The site also has a video that summarises the process “Make a Bottle of Light”. Chlorine is added to water in this video as part of the installation process and the bottle cap shielded from solar breakdown. Comment on these two changes further.

¹ <http://en.wikipedia.org/wiki/Cerium>

² <http://www.isanglitrongliwanag.org> –