

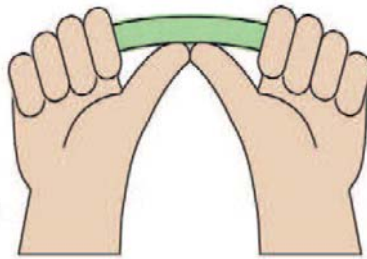
# Sticks of light

Light sticks are plastic rods that glow when you bend them. How they work:

## You'll need

- Three light sticks that are the same size
- Refrigerator
- Large pan
- Clock
- Kitchen sink

## Try This



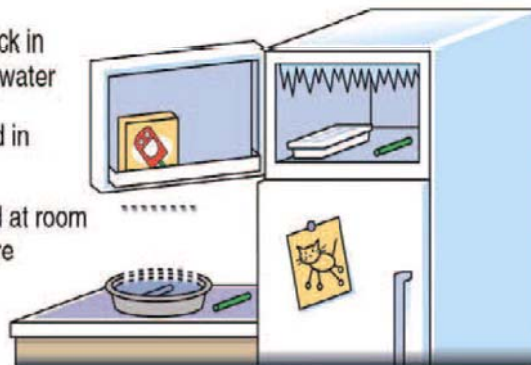
- 1 Put pan in sink and fill with hot water  
In a dark room, start all sticks glowing  
Are they the same brightness?

- 2 Put first stick in pan of hot water  
Put second in freezer  
Leave third at room temperature



- 3 Five minutes later, take all three sticks to dark room  
Are they the same brightness?

Put No. 1 back in hot water and No. 2 back in freezer;  
compare sticks this way every 10 minutes until they all go out



## What happened?

No. 1 is brightest  
but goes out first



No. 2 shines  
least  
but lasts the  
longest



No. 3 is in between



Chemicals inside  
stick mix and make  
light when you  
bend the stick

Reaction goes  
faster when stick  
is warm, but it  
quickly uses up  
chemicals, and  
stick stops  
shining

Source: Peter Macinnis' Science  
Playwiths  
Graphic: Helen Lee  
McComas, Paul Trap/TNS