



## Constant Care

Project: Do Plants Need Light to Grow?



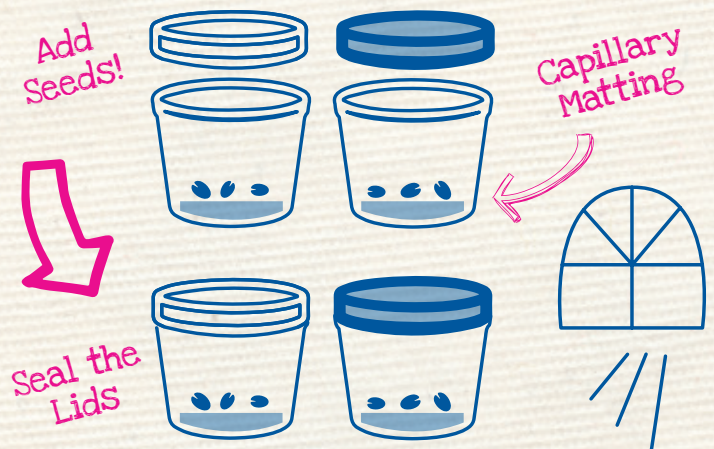
### Do Plants Need Light to Grow?

Banana plants, like most plants, need light in order to grow and be healthy. Let's investigate the effect of light on plant seedlings. Mustard seeds are recommended.

- 1 Take two clear film pots – one with a clear lid and one with a black-out lid



- 2 Place a damp piece of capillary matting at the bottom of each, add a seed(s) and seal the lids. Place them in a light-filled area – but not in direct sunlight



- 3 After 3-5 days, examine the pots and draw what you see



- 4 Results: without light, at first many young plants can grow quickly, using up food stored in the seed. In the pot with the black-out lid, the plant may have grown enough to be coiled under the lid. However, it is likely to be yellow because chlorophyll cannot develop in the dark. Without chlorophyll, plants cannot make their own food and they will die once the seed has been used up







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How to Set up  
the Pots

Clear Lid



What do you think will  
happen to the seeds?

Clear Lid



What actually  
happened?

Clear Lid



Black Out  
Lid



Black Out  
Lid



Black Out  
Lid



Black Out Lid with  
Hole (see next page)



Black Out Lid with  
Hole (see next page)



Black Out Lid with  
Hole (see next page)



Draw the  
results!

Draw what  
you THINK will  
happen to the  
seeds...

Draw what  
ACTUALLY happened  
to the seeds!





Stage 6

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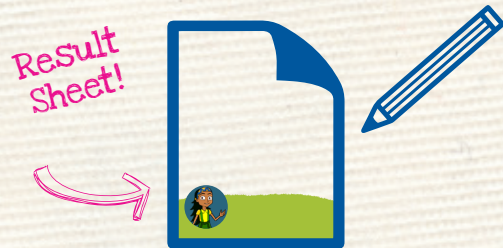
### Extend the Activity



- 1 Place a black-out lid on both pots containing seeds/damp matting. In one of the pots, insert a hole in the side near the top (approx. the size of a hole punch)



- 2 Take a result sheet and draw what you think will happen to the seeds



- 3 After 3-5 days, examine the pots and draw what you see



- 4 The young plants in the pots with a hole in the side are not as tall and spindly as those growing in the dark. However, the plants grow towards the hole, which helps them to get more light. Even when there is only a small amount of light, the young plants are able to develop the green colour and so can make their own food

