

# Design a biodegrade test



## How to make the most disgusting potato

### Essential Equipment

- Potato
- Plastic carrier bags
- Cork borer
- Knife
- Cutting tile
- Ruler
- Petri dishes

### Optional Equipment

- Soil
- Salt water
- Oil

### Method

1. Use the borer to remove 4 cylinders of potato.
2. Cut all 4 pieces of potato into the same length.
3. Place each potato cylinder into a petri dish.
4. Cut out 4 squares of plastic carrier bag to the same size.
5. Add a plastic carrier bag square to each of the 4 petri dishes.
6. Change the environment for each petri dish (temperature, oxygen availability).
7. Leave your samples for a fixed time .

## STUDENT SHEET 3c

Potato & plastic sample	How have you changed the conditions?
1	
2	
3	
4	

Samples	Observations
1	
2	
3	
4	

### Summary Questions

1. What factors increase the rate of degradation?

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2. From your investigation, which factor(s) caused the most degradation?

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3. Explain why this might have happened?

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4. Would you recommend using starch-based (bio) plastics? Explain why.

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