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DNA Extraction 1/4/17

Catalyst:

Why DNA is important.

Where in the cell is DNA located in eukaryotes? Prokaryotes?

Reflection:

28L

28R

Catalyst:

List 3 reasons why DNA is important.

Where in the cell is DNA located in eukaryotes? Prokaryotes?

Reflection:

28L

DNA Extraction 1/4/17

Question: Can we extract DNA out of the cells of living things?

28R

Catalyst:

List 3 reasons why DNA is important.

Where in the cell is DNA located in eukaryotes? Prokaryotes?

Reflection:

28L

DNA Extraction 1/4/16

Question: Can we extract DNA out of the cells of living things?

Prediction: (Will we be able to extract DNA? What will it look like? How will we know that we have succeeded?)

28R

Catalyst:

List 3 reasons why DNA is important.

Where in the cell is DNA located in eukaryotes? Prokaryotes?

Reflection:

28L

DNA Extraction 1/4/17

Question: Can we extract DNA out of the cells of living things?

Prediction:

Hypothesis:

IF…..THEN….BECAUSE

28R

Catalyst:

List 3 reasons why DNA is important.

Where in the cell is DNA located in eukaryotes? Prokaryotes?

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DNA Extraction 1/4/17

Question: Can we extract DNA out of the cells of living things?

Prediction:

Hypothesis:
IF…..THEN….BECAUSE

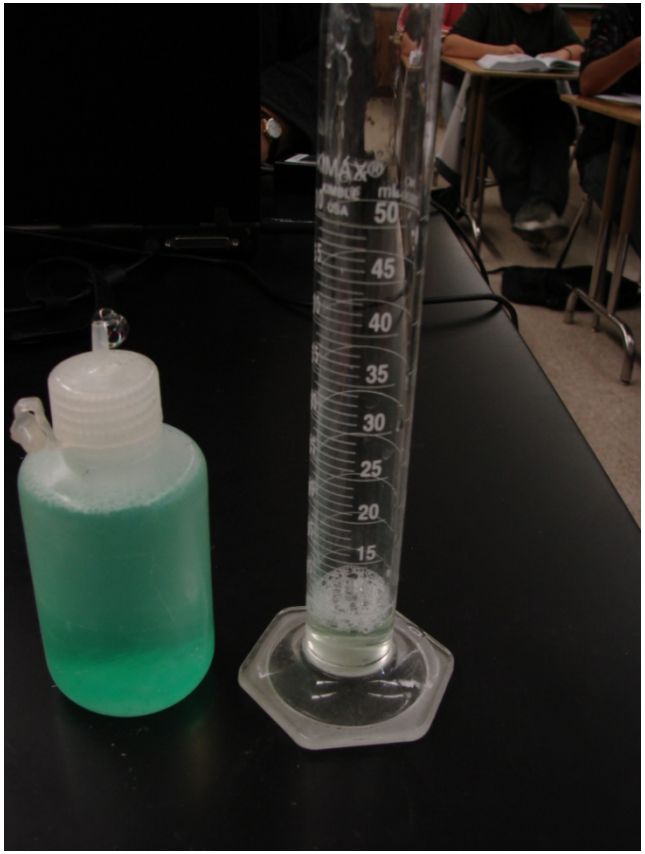
Test: (draw the finished product)

28L

- 1. Check the seal on your plastic bag, be sure to push ALL the air out of it.

- 2. Carefully mash the strawberry for at least 2 minutes.
- ***Do not break the bag.

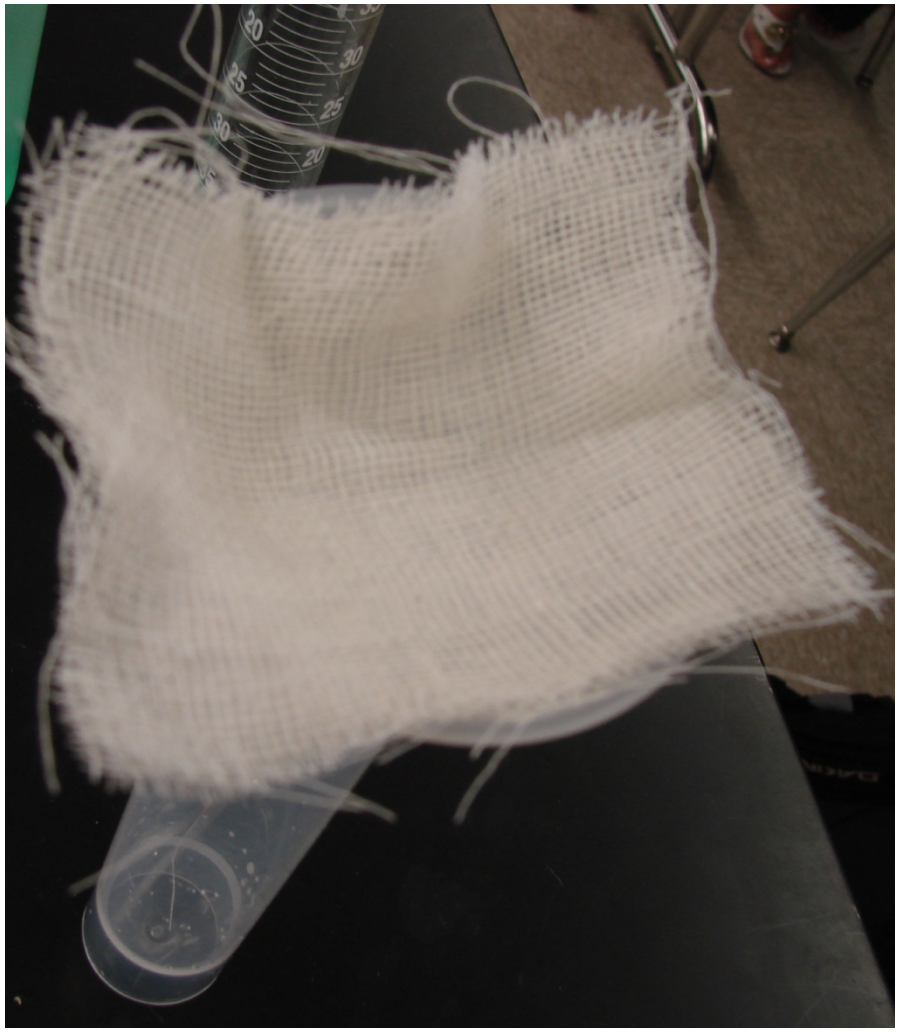
- 3. Pour 10 mL of the DNA extraction buffer into the bag with the crushed strawberry.
- Reseal the bag with no air.



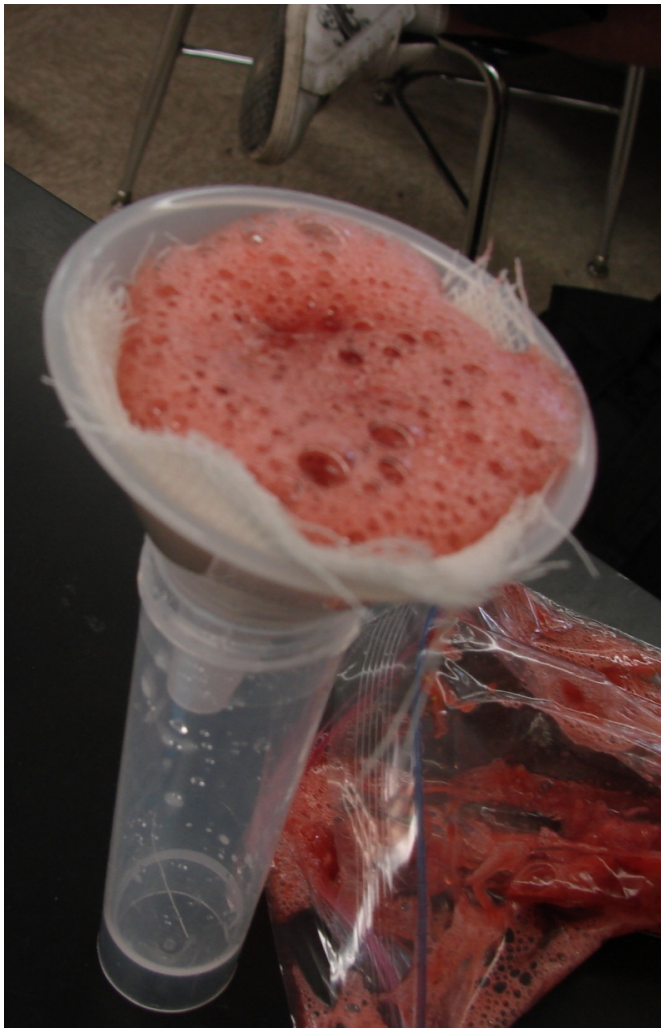
- 4. Mash the strawberry/DNA extraction buffer solution for 1 minute.

- 5. Place a funnel into your graduated cylinder.

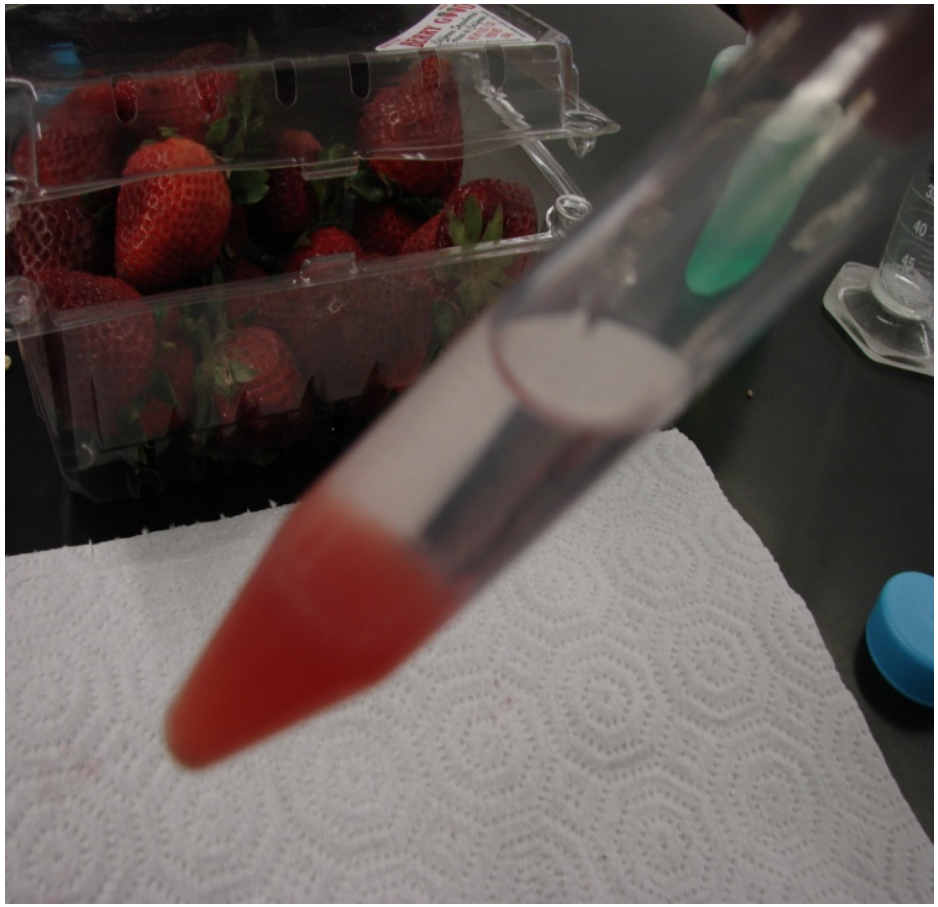
- 6. Fold the cheesecloth square a filter. The cheesecloth will overlap the edge of the funnel.



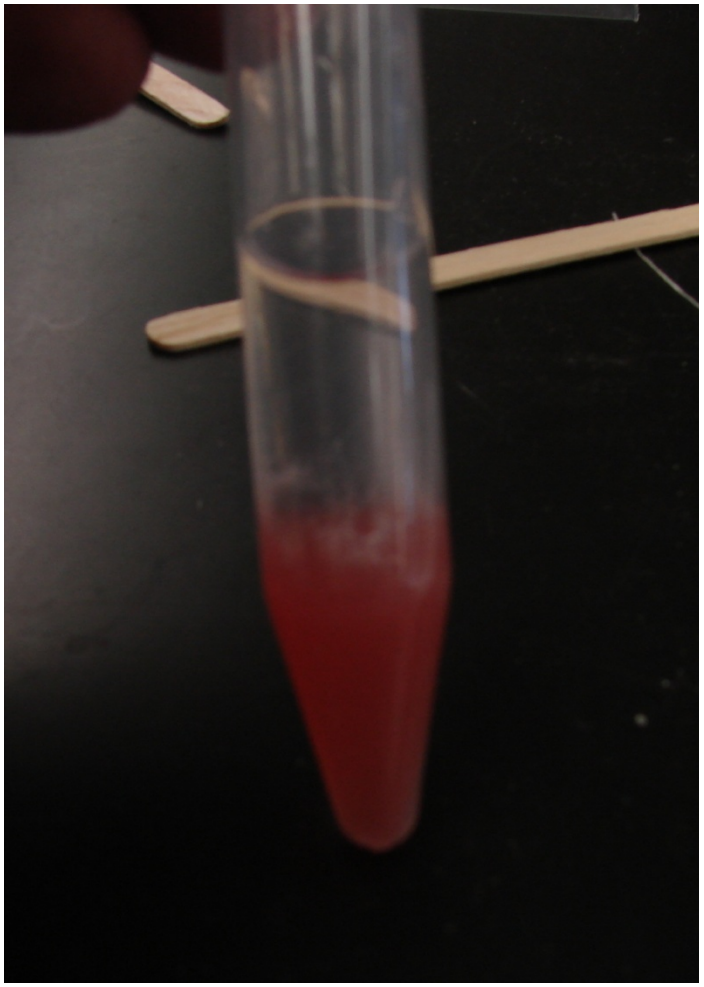
- 7. Slowly pour the strawberry/DNA extraction buffer solution into the funnel.



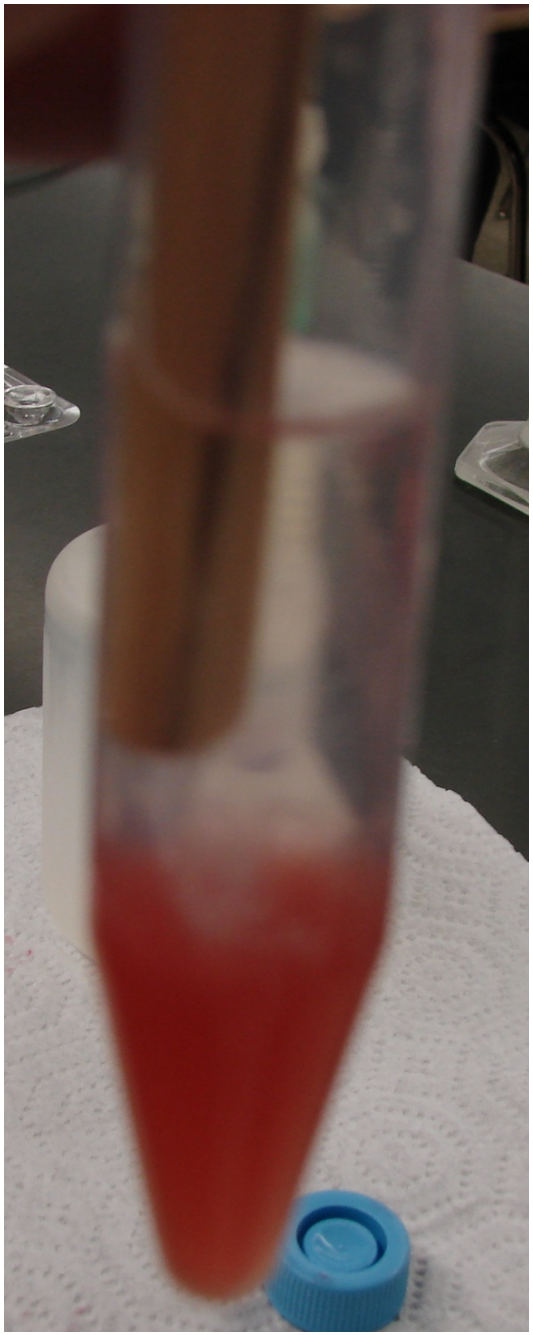
- 8. I will come add 5ml cold 70% Isopropyl alcohol to your graduated cylinder.
- You should see 2 distinct layers form



- 9. Watch closely as translucent (clear/see-through) strands of DNA begin to clump together between the strawberry extract and Alcohol layer. Tiny bubbles will appear in the ethanol layer as the DNA precipitates (forms a solid).



- 10. Slowly and carefully rotate the wooden stick in the ethanol directly above the strawberry extract layer to spool the DNA.



- 11. Remove the wooden stick from the tube to observe the DNA that has been extracted from the strawberries.
- DRAW IN YOUR TEST BOX WHAT YOU SEE

Catalyst:

Why DNA is important.

Where in the cell is DNA located in eukaryotes? Prokaryotes?

Reflection:

Explain how this experiment proves that your fruit is living?

28L

DNA Extraction 1/4/17

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Hypothesis:
IF…..THEN….BECAUSE

Test: (draw the finished product)

28R