

Y8 Photosynthesis and Respiration Homework Grids

Name: _____

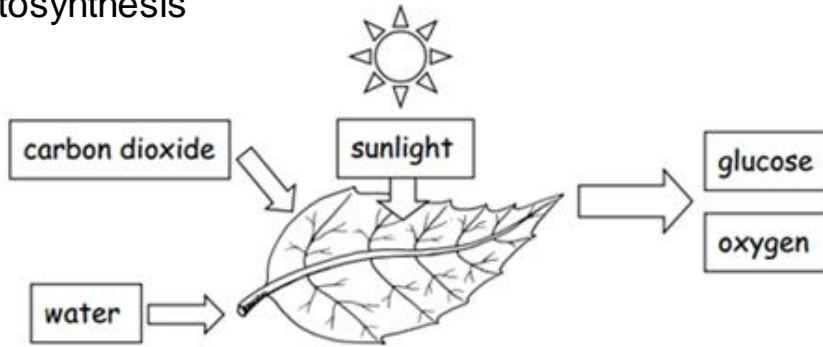
Science Teacher: _____

	Comment
Grid 1.1	
Grid 1.2	
Grid 1.3	
Grid 1.4	
Grid 1.5	
Grid 1.6	
Grid 1.7	
Grid 1.8	

Grid 1.1: Use KO 33-34

Due: _____

Using the diagram below write a word equation for photosynthesis



_____ + _____ → _____ + _____

Higher

Explain how a plant gets the reactants needed for photosynthesis to the leaves.
(*Explain – use the word "because"*)

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Write definitions for each of the following terms:

Chlorophyll

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Fertiliser

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Stomata

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Grid 1.2: Use KO 34

Due: _____

What chemical should you use when testing a leaf for starch?

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Describe the results of the test for when starch is present in a leaf.

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What is glucose in plants used for?

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Higher: Write a method for how you would test a leaf for starch. In your method, include any safety precautions you should take.

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Grid 1.3: Use KO 34

Due: _____

What factors affect photosynthesis? Name at least 3.

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What minerals do plants need and why are they needed?

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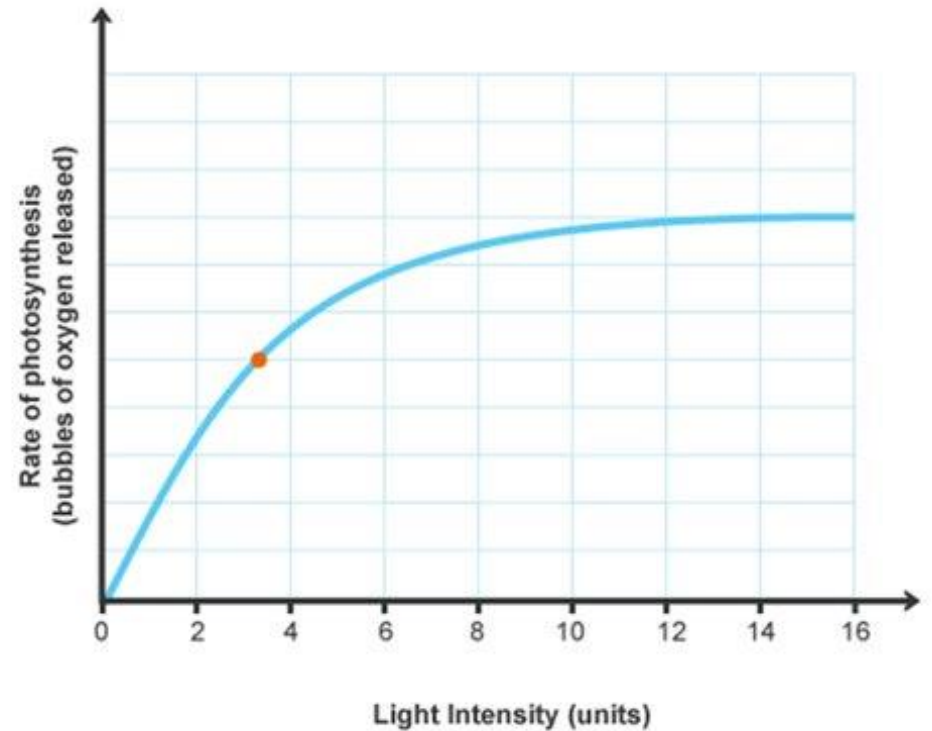
Where do plants get these minerals from?

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Using the graph below, describe how light intensity affects rate of photosynthesis



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Grid 1.4: Use KO 33-35

Due: _____

Describe how carbon dioxide, water and light are absorbed by the plant.

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Describe what happens to the glucose and oxygen that a plant produces.

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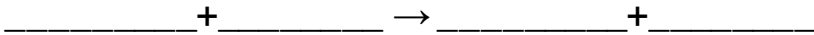
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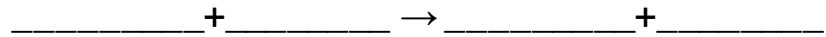
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Higher: Write a balanced symbol equation for photosynthesis



Higher: Write a balanced symbol equation for respiration



Grid 1.5: Use KO 33-34

Due: _____

Explain why a lack of carbon dioxide affects the rate of photosynthesis.

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In the school pond there were lots of water lilies with large leaves covering the surface.

There were **not** many plants growing below the surface. Suggest a reason for this.

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Plants require magnesium to make chlorophyll. Suggest how you would know a plant didn't have enough magnesium from looking at the leaves.

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Describe how a cactus is adapted to its environment

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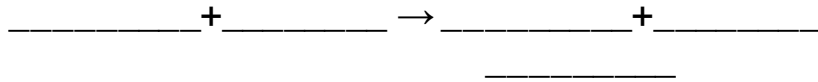
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Grid 1.6: Use KO 35

Due: _____

Using the reactants and products on page 37, write a word equation for aerobic respiration.



Higher: Describe in detail how the reactants for respiration get to cells around the body

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Write definitions for each of the following terms:

Respiration

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Mitochondria

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Aerobic Respiration

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Grid 1.8: Use KO 33-35

Due: _____

Higher: Using your completed table on Grid 1.7, compare aerobic and anaerobic respiration

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What is fermentation?

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What is the mitochondria? Is it used in anaerobic respiration?

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