PHOTOSYNTHESIS

1. Plants are very important organisms. Copy and complete the table below.

<table>
<thead>
<tr>
<th>Name of plant</th>
<th>Use of plant</th>
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2. What is the name of the process by which plants manufacture their own food?

3. Describe the energy change which takes place during this process.

4. Leaves contain a green substance which is important for photosynthesis.
   i) Name this substance.
   ii) What is its function?

5. i) Which food substance is produced during photosynthesis?
    ii) This food is stored as starch. Name the chemical used to test for starch.
    iii) Describe the colour change which occurs in this substance if starch is present.
    iv) Why is a leaf boiled in water before it is tested for starch?
    v) What is the job of the alcohol (ethanol) when testing leaves for starch?

6. Name the gas which plants need for photosynthesis.
PHOTOSYNTHESIS

1. The diagram shows a plant which has green and white leaves.

![Diagram of a leaf with green and white sections]

This leaf is tested for starch. Redraw the leaf showing where starch would be present as a result of photosynthesis.

2 (a) Read the following passage. Use the information in the passage to label the diagram.

**Oxygen** gas can be collected from pondweed when it is photosynthesising. This is done by putting pondweed in water in a beaker and placing a funnel over it. A test-tube of water is then placed over the funnel. As the oxygen collects in the test-tube, it pushes the water out

![Diagram of a beaker with a funnel and test-tube]

b) Complete the word equation for photosynthesis

carbon dioxide + ____________ → ____________ + ____________
HOMEWORK 3 – Plants are Amazing!

WHAT TO DO:

1. Information gathering

Use as many sources of information as you can to find out about One of the following:

- ✽ The Tallest living plant (not flower!) in the world

OR

- ✽ The Oldest living plant in the world

Suggested sources: There are many sources you can use to find out the information

- reference books
- encyclopedias
- the internet e.g. www.ask.com, www.google.com
  (Remember that you can also use the school library at your allocated times to find information.)

2. Presentation of gathered information

Present your information about the tallest or oldest living plant in the world in an interesting way e.g. poster, newspaper headline. It may be hand written or word processed.

You MUST include the following:

- ✽ An eye catching headline
- ✽ A picture or diagram

✽ Plant information:

- its scientific and common name
- how old or tall it is
- where in the world it is found
- a description of the plant
- any other interesting facts or information about the plant
- The source(s) of your information