Week 6 Lesson 2

Artificial photosynthesis (2)

**Aim:** to look at an example of scientific research inspired by nature, which is still in the developmental stage but which has enormous implications should it be successful.

**Keywords:** carbon dioxide, catalyst, chromatography, nanotechnology, oxygen, photosynthesis, water.

Starter activities

1. Practical – is chlorophyll the only pigment in green leaves? – continued

Set up chromatogram from last lesson and leave for 15 – 20 minutes. Keep an eye on the solvent fronts.

1. Homework photosynthesis PowerPoints

Show students’ PowerPoints that they produced for last week’s homework task.

Main activity

1. Practical – is chlorophyll the only pigment in green leaves? - continued

Complete the practical from previous lesson.

Extension

Students calculate the Rf values for the pigments that they separated and use them to identify each pigment.

Plenary activity

1. Artificial photosynthesis and me

Ask students to describe what artificial photosynthesis could mean to them.