

## 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.

##### 2. 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.