



Science Sauce Online

A source for free flipped learning lessons

Flipped learning reverses the traditional classroom process of “learn it in school, practice at home”. Flipped learning involves students learning new content at home through a video, reading, listening or other activity. They then come to class with the foundation knowledge, ready to really engage with the topic. This is a flipped learning lesson with self-study materials and suggested class activities.

Resources for this lesson, including the student tasks, can be found at:

ScienceSauceOnline.com

Enter lesson code:

01900

Lesson Topic: **PHOTOSYNTHESIS**

Age: 14-16

Self study input method: Video

Self study task: Question sheet

Classwork prep time: Near zero

STUDENT PRE-CLASS TASK

- Watch the video: “Photosynthesis”.
- Answer the questions on the student homework task sheet.

IN-CLASS TASKS

SCIENCE THEATRE: Create a skit to demonstrate the process of photosynthesis.

Time (mins)	Students...	Teacher...
2	In groups of about 4 or 5, review answers to the homework task.	Monitors.
3	Review answers (and make corrections if necessary).	Gives answers to the student task sheet.
5	Get into groups of 4 or 5. Listen to the instructions. Decide on the key points that will be covered in the skit	Gives instructions on the skit. Groups students.
10	Compose their skit, with the instruction that all students must participate.	Monitors and gives guidance, ensuring concepts are demonstrated effectively in the skit.
15 (dependent on class size)	Perform their skits for the class. The students in the audience write a "plus-minus-replay" list - see below* . (This list is for the benefit of the observer and so sharing their feedback with the performing group is not necessary).	Observes, makes notes for feedback. After each presentation the teacher can give optional feedback where necessary.
10	Write one/two exam questions that they think might be on the test.	Monitors.
5	Challenge each other with their exam questions	Monitors.

*The "plus-minus-replay" activities require students to write one strength of the presentation, one weakness, and one bit of the presentation that they would like to see again (because it was very interesting or funny, for example). Time depending, teachers may allow observing students to request the performing students to replay a short part of the presentations.

ANSWERS TO STUDENT TASK

Answers to the student task sheet will be relatively obvious for subject teachers, and can all be found by reviewing the student self-study resources.

Answers are not published here, as these sheets are easily accessible by students. If you need clarification on any of the questions please feel free to email me and I'll get back to you ASAP.

contact@sciencesauceonline.com