

Teaching notes

The aim of this challenge is to make links between a word, image or sound prompt and the topic of photosynthesis.

The activity helps students explore and extend their understanding of photosynthesis. It is also useful to highlight misconceptions.

The activity is described here with some examples.

Prior learning: Leaf structure, testing for starch, process and word equation for photosynthesis.

Running the activity

Students work in groups of two or three.

To keep things moving, have a time limit on responses. Use [Teachit Timer](#) (free to all) to structure the session.

At its simplest:

Students are shown a word prompt and each group has to make a connection between it and the topic of photosynthesis.

To add more challenge:

- Generate a random number, between one and twelve.
- Select a structure card from a set of three, '**Words**', '**Connections**' or '**Steps**'.

The structure cards give the following instructions:

- **Words** - make a link to photosynthesis using the specified number of words.
- **Connections** - make the specified number of links between the word prompt and photosynthesis.
- **Steps** - using the specified number of short sentences or phrases (joined by words such as 'because') get from the word prompt to photosynthesis.

For example:

Word prompt	Animal
Random number	2
Structure card	Steps

In this round, students must link the word 'animal' to the topic of photosynthesis in two steps.

E.g 'a rabbit' (one step) 'because it eats plants which carry out photosynthesis' (second step)

Make it random:

Each group receives a set of word-prompt cards, a set of structure cards and two dice. Groups work independently of the class.

They can bring their best links to the class for discussion.

Or ...

Pre-prepared:

Have a presentation ready to use with the class (see the PowerPoint for examples).

Differentiation

Differentiate through the 'word prompts'.

Here are some examples ...

Simple	Obscure	Anagrams	Verbs/ adjectives	Silly	Other science
air	scurvy	teha	compete	Santa's reindeer	electricity
plant roots	chlorophyll	nyoexg	depend	The Bake Off	temperature
rain	lion	glhti	break	Astro turf	absorb
energy	glass	tomatas	quickly	Stamp collecting	reaction
leaves	BBQ	engre	vital	popcorn	digestion
glucose	soil	sactrh	fluctuate	Fee-fi-fo- fum!	atoms

Structure cards

Words	Connections	Steps
Words	Connections	Steps
Words	Connections	Steps
Words	Connections	Steps
Words	Connections	Steps
Words	Connections	Steps
Words	Connections	Steps
Words	Connections	Steps
Words	Connections	Steps
Words	Connections	Steps

Sample word prompt cards

Simple	Obscure	Anagrams	Verbs/ adjectives	Silly	Other science
air	scurvy	teha	compete	Santa's reindeer	electricity
plant roots	bucket	nyoexg	depend	The Bake Off	temperature
rain	lion	glhti	break	astro turf	absorb
energy	glass	tomatas	quickly	stamp collecting	reaction
leaves	BBQ	engre	vital	popcorn	digestion
glucose	soil	sacrh	fluctuate	Fee-fi-fo-fum!	atoms