



Binogi Video: The Plant Cell
 English-Mandarin Bilingual Concept List
The Escape Projects

<p>Photosynthesis A process where mainly plants use sunlight, water, and carbon dioxide to produce oxygen and sugars.</p>	<p>光合作用 “绿色植物通过叶绿体·利用光能·把二氧化碳和水转化成储存能量的有机物(主要是淀粉)·并且释放氧气的过程”(2004·p.67)。</p>	
<p>Glucose A simple sugar that can be broken down fast into energy by an organism. It exists naturally in plants.</p>	<p>葡萄糖 一种可以快速被生物体分解为能量的单糖。自然存在于植物中。</p>	
<p>Cell The smallest unit of life that exists in all living creatures. The human body consists of several millions of cells and the simplest organisms consist of only one cell.</p>	<p>细胞 “是生物最基本的结构和功能单位”(2004, p.16)。人体由上百万个细胞组成·而最简单的生物体就是一个细胞。</p>	
<p>Protein A substance that plays an important role in the entire body. It is needed to build up the body's organs, hormones, and transport of nutrients. Protein is found in beans and meat.</p>	<p>蛋白质 是生命的物质基础。主要构建器官和激素·及负责营养物质的运输。豆类 and 肉类通常含有蛋白质。</p>	
<p>Algae Groups of organisms that live in water and can perform photosynthesis.</p>	<p>藻类植物 生活在水中并可以进行光合作用的一类生物。</p>	
<p>Cell Nucleus The center part of the cell where the cell's development and functions are controlled.</p>	<p>细胞核 细胞的中心部分·控制细胞的发育和功能。</p>	
<p>Chloroplast The part in a plant cell where photosynthesis occurs and contains a substance called chlorophyll.</p>	<p>叶绿体 在植物细胞中发生光合作用·并含有叶绿素。</p>	



<p>Chlorophyll A substance that gives the plants their green color and captures the light in photosynthesis.</p>	<p>叶绿素 使植物呈现绿色并在光合作用中能够捕捉光的一种物质。</p>	
<p>Organelle Parts inside the cell that constitute specific functions.</p>	<p>细胞器 细胞内部具有特殊功能的结构。</p>	
<p>Cell Membrane A thin layer that protects and controls which substances can pass in or out of the cell.</p>	<p>细胞膜 细胞外侧的一层薄膜，能控制物质的进出，并起到保护作用。</p>	
<p>Paramecium A tiny living thing found in water that is made up of a single cell.</p>	<p>草履虫 在水中发现的单细胞微生物。</p>	
<p>Cell Wall A thick layer that protects and gives the cell a firm shape. Cell walls are found only in plants, fungi, and bacteria.</p>	<p>细胞壁 细胞外侧的一层厚膜，具有保护和支撑细胞的作用。细胞壁只能存在于植物、真菌和细菌中。</p>	
<p>Vacuole A hollow space filled with fluid which makes the plant cell retain its shape.</p>	<p>液泡 细胞内充满液体的泡状结构，使植物细胞保持其形状。</p>	
<p>Seeds Small grains that under the correct conditions can begin to grow and give rise to a new plant.</p>	<p>种子 在适宜条件下可以生长成为新植株的微粒。</p>	
<p>Green Plants (Plantae) A large group of plants where all land plants as well as green algae are included.</p>	<p>绿色植物 包含所有陆地植物以及绿藻的一大类植物。</p>	

Note: The Plant Cell is covered in Grade 7 Biology/Science in China. The content will be refreshed and taught deeper later in Grade 10.

Reference: Zhenfang.W, Wenjun.Li, Zhiguo.Z, Hongmin.T, Libo.Zhou&Youxun.W.(2004) Yi Wu Jiao Yu Ke Cheng Biao Zhun Shi Yan Jiao Ke Shu: Sheng Wu Xue (Qi Nian Ji, Shang Ce).

