



Binogi Video: History of Biology
 English-Mandarin Bilingual Concept List
The Escape Projects

<p>Molecule A group of atoms attached to each other by a chemical bond.</p>	<p>分子 通过化学键相互链接的一组原子。</p>	
<p>Species Organisms with similar appearance that are able to produce fertile offspring.</p>	<p>物种 能有繁殖出可育后代并且具有相似外观的有机体。</p>	
<p>Evolution The theory of evolution, describing how species develop over time through different processes.</p>	<p>进化 描述物种如何通过不同的过程随时间而发展的进化理论。</p>	
<p>Biodiversity (Biological Diversity) The variety of different species of for example plants, fungi and animals in a certain area.</p>	<p>生物多样性 在某一地区不同物种的多样性，例如植物、真菌和动物。</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>Deoxyribonucleic Acid (DNA) Molecules that carry genetic information. They act like a blueprint for the structure of all organisms.</p>	<p>脱氧核糖核酸 (DNA) 携带遗传信息的分子。作为所有生物结构的模型。</p>	
<p>Scientific Method A method where question formulations are tested through experiments and observations. The results are analyzed and interpreted then conclusions can be drawn.</p>	<p>科学方法 通过实验和观察来检验问题形成的一种方法。通过对结果进行分析和解读，然后得出结论。</p>	
<p>Myth (Mythological) Stories explaining why the world looks and works as it does, but can not be supported by facts.</p>	<p>神话 解释了为什么世界看起来如此和为何如此运转的故事，但其却无法用事实验证。</p>	





<p>Microscope An instrument used to be able to see objects that are too small to see with the eyes.</p>	<p>显微镜 用来观察肉眼无法识别物体的一种仪器。</p>	
<p>Genetics The study of DNA molecules and the passing down of characteristics from one generation to the next.</p>	<p>遗传 与基因相关·代代相传的现象。</p>	
<p>Cell Theory A theory that describes that all living organisms are made up of cells and they are the smallest building blocks of life.</p>	<p>细胞理论 描述所有生物都是由细胞构成·并且其作为生命最基本组成部分的一种理论。</p>	
<p>Gene A unit with information about how characteristics such as appearance are inherited from one generation to another.</p>	<p>基因 能够携带关于特征（如外貌）等遗传信息的一种单位。</p>	
<p>Organism A living creature such as an animal, a plant or a bacterium. It can be made up of multiple cells or only one cell.</p>	<p>生物 是一个有机体·例如动物·植物或者细菌·可为多细胞生物或者单细胞生物。</p>	
<p>Theory Thoughts and statements that together try to explain how something complicated works.</p>	<p>理论 试图共同解释复杂事物如何运作的想法和观点。</p>	
<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。豆类和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 包含所有陆生植物以及绿藻的一大类植物。</p>	

Note: The History of Biology is mostly covered in Grade 7 Biology/Science in China, except that Gene is brought up in Grade 8.

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

