



Conquesta 2008

(International Multiple Choice School Olympiads – Est. 1998)
 Conquesta, P O Box 593, Runaway Bay QLD 4216, Australia
 Tel: (07) 5574-6677 * Fax: (07) 3112-4211
conquesta-olympiads@bigpond.com * www.conquestaolympiads.com



Natural Sciences – Year 4

Welcome to your Conquesta Olympiad. As you read and answer the questions, we hope that you enjoy and learn from the information. Once you have read the information and the questions carefully, you have to make a choice. When you have decided which of the answers is correct, completely fill in the matching square on your answer sheet using a 2B or a B pencil. For example, if the answer to question 4 is c, then neatly fill in the square containing c next to the number 4. See example below. Fill in only one square per question and make sure you completely rub out any mistakes so that the answer is clear.

Example:-

4.	a	b	c	d
----	---	---	---	---

<p>1. Which of these is <u>not</u> a plant?</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">(a) </div> <div style="text-align: center;">(b) </div> <div style="text-align: center;">(c) </div> <div style="text-align: center;">(d) </div> </div>	<p>2. The part of a plant cell that gives the cell its green colour is the</p> <p>(a) nucleus. (b) cytoplasm. (c) vacuole. (d) chloroplast.</p>
<p>3. If all the flowers are picked off the plants, the plants will not be able to</p> <p>(a) grow taller. (b) produce seeds. (c) make their own food. (d) absorb nutrients from the soil.</p> <div style="text-align: right;"></div>	<p>The diagram shows a bean seed that is beginning to germinate in soil. The first structure to emerge is labelled X.</p> <p>4. What is the function of structure X?</p> <p>(a) To make food. (b) To absorb water. (c) To produce seeds. (d) To release oxygen.</p> <div style="text-align: right;"></div>
<p>5. Drake has started a garden. What can Drake do to enrich the soil so that his plants will grow better?</p> <p>(a) Remove earthworms. (b) Add more water to the soil. (c) Increase the amount of pesticide he uses. (d) Mix decomposed plant matter into the soil.</p>	<p>6. A pupil set up an experiment to test how much bean plants will grow in soil with salt in it. The pupil grew 50 plants in one group and 50 plants in the other group. The only thing that can be different in the two groups is the amount of</p> <p>(a) soil in each plant pot. (b) fertilizer given to each plant. (c) salt in the soil in each plant pot. (d) water given to each plant.</p>
<p>7. The leaves of which plant below show the best structural adaptation for protecting the plant from predators?</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">(a) </div> <div style="text-align: center;">(b) </div> <div style="text-align: center;">(c) </div> <div style="text-align: center;">(d) </div> </div>	<p>8. In which plant cell structure (a) – (d) does photosynthesis occur?</p> <p>(a) Nucleus (b) Cytoplasm (c) Chloroplast (d) Vacuole</p> <div style="text-align: right;"></div>
<p>9. Few flowers are able to grow on the northern arctic tundra. Those that do grow there have very short stems. How does this adaptation help them survive in the arctic climate?</p> <p>(a) It protects them from freezing. (b) It prevents them from being eaten by consumers. (c) It protects them from breaking in strong winds. (d) It makes it very hard for them to be pulled from the ground.</p>	<p>10. A tree has one light ring and one dark ring to make up one year's growth. How many years of growth are shown in the picture?</p> <p>(a) 4 (b) 8 (c) 16 (d) 24</p> <div style="text-align: right;"></div>
<p>11. Which of the following is a benefit that many flowering plants get from animals?</p> <p>(a) Oxygen to use in photosynthesis. (b) Seed carried to new places. (c) Shelter from direct sunlight. (d) Moisture to prevent wilting.</p>	
<p>12. Barnacles and corals are two types of animals that live in the ocean. Both animals build a hard layer of calcium around their soft body parts. What is the most likely reason that they build these layers?</p> <p>(a) To keep them from drying out. (b) To help them capture food. (c) To protect them from predators. (d) To prepare them for reproduction.</p>	
<p>13. Which of these are found only in vertebrates?</p> <p>(a) backbones (b) shells (c) blood (d) fur</p>	

