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|  | **Year 12 General Integrated Science**  **The Ecosystem**  **Task 5 – Unit 3**  **Extended Response** |

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| **Modelling Biogeochemical Cycles in a Bottle**  **Task Brief**  There are four parts to this Assessment Task | icture |

**Part 1: Research Due: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Research the abiotic materials needed to build a terrarium.

Click on the following links

* "How to Build a Terrarium" <http://www.bunnings.com.au/diy-advice/home-decor/craft-ideas/how-to-make-a-terrarium>
* and the following link for some more ideas.

Making a soda bottle terrarium <http://www.stormthecastle.com/terrarium/soda-bottle-terrarium.htm>

1. List the materials needed and explain why each is needed in the terrarium.
2. Research the types of plants that would be suitable to grow in a bottle ecosystem. List them.

**Part 2: Building a model ecosystem Due: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Bring a suitable jar, preferably with a lid, and construct your ecosystem.

**Part 3: Constructing a poster explaining a biogeochemical cycle in the model ecosystem. Due: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Construct a poster showing how **one** nutrient, of your choice, cycles through the ecosystem.

**Part 4: Preparing and writing an assessed Extended Response.**

**Assessment Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Prepare an **Extended Response** explaining how the nutrient that you have chosen cycles through the ecosystem.
2. On a specified date, during class, answer an **Extended Response** question based on the cycling of nutrients in an ecosystem. You will not be allowed notes, only your poster.