

## ENVIRONMENTAL EDUCATION & AWARENESS PROGRAMME PLANNER

**PROGRAMME TYPE** (circle/cross): curriculum aligned/ holiday programme/ general awareness programme/ volunteer-based programme/ camps/ talk

### DETAILS

|                                    |                                 |   |         |
|------------------------------------|---------------------------------|---|---------|
| Name of school/ group              |                                 |   |         |
| No learners/ participants expected | No learners/participants actual | Programme length/duration                   | 1 hour  |
| Location (reserve/site)            |                                 | Grade/age group                             | Grade 6 |
| Is this part of the work plan?     | YES/ NO                         | If no, motivate why the programme is needed |         |

### CONTENT

|       |   |   |
|-------|---|---|
|       | Theme (circle/cross)  | Ecosystems and food webs – focus on marine life and estuaries   |
| Know  | Topics covered (e.g. water cycle/ importance of water)  | What are ecosystems and food webs? Importance of ecosystems & food webs, Identifying threats to ecosystems, solutions to threats, Creating an ecosystem and food web, Importance of estuaries and oceans. |
|       | Curriculum link (for curriculum aligned programmes only) – note subject/strand/topics (if not listed in topics above) | <b>NS and Tech:</b><br><br><b>Life and living and processing</b><br><b>Ecosystems and food chains</b>   |
| Do    | Prior knowledge required (if applicable)  | N/A   |
|       | Skills practiced (cross/circle)   | explain identify label name (know)<br>classify define describe listen read recognise write count (do)<br>commit choose tell (value)   |
| Value | Key message (e.g. we must save water)   | Food webs and ecosystems are interconnected. The one would not be able to function without the other.   |

### GENERAL LOGISTICS

|   | Responsible person | Done (tick) | Status |
|---|--------------------|-------------|--------|
| Invite *  |                    |             |        |
| Venue   |                    |             |        |
| Transport   |                    |             |        |
| Booking confirmed                                     |                    |             |        |
| WCED permission *                                     |                    |             |        |
| Presentation equipment & camera                       |                    |             |        |
| Risk assessment done, confirmation and checklist sent |                    |             |        |
| Catering *  |                    |             |        |
| Indemnity *   |                    |             |        |
| Budget and cost centre                                |                    |             |        |

**Other:**

Plan requested by: \_\_\_\_\_ (name)

\_\_\_\_\_ (date)

Plan approved by: \_\_\_\_\_ (name)

\_\_\_\_\_ (date)

### LESSON PLAN

| Time                                  | Location                            | Activity & explanation   | Resources & person responsible for bringing/preparing the resource        | Facilitating staff (if more than 1, indicate lead facilitator & timekeeper)     |
|---------------------------------------|-------------------------------------|--|---|---|
| e.g. 08h00 or 20 mins                 | e.g. Classroom/ library / EE centre | e.g.   | e.g. Pics of the Western Cape shoreline and marine animals                | e.g. Natanya Dreyer (lead facilitator), Clinton Windvogel & Graham Lewis assist |
| <b>INTRODUCTION &amp; ICEBREAKER</b>  |                                     |  |   |   |
| 2 minutes                             |                                     | 1. <b>Introduction:</b> CapeNature and purpose of the day, topic<br>Introduce relevant reserve – see minimum standards   |   |   |
| 10 minutes                            |                                     | 2. <b>Tuning-In/ Icebreaker: Who am I</b><br><br>Know: Explain to the class that marine animals are those that live in the sea and estuaries. Ask them if they know the difference between sea water and salt water. Explain that sea water has salt in it and fresh water does not. Explain that estuaries are the place where rivers flow into the sea, but the sea also flows into the river (to put it simply, may need to introduce/explain tides here) between land and sea.<br><br>Ask learners to spot the estuary as an introductory game to understanding what estuaries are.  | Presentation – activity and solutions in here                             |   |
| <b>BODY/ ACTIVITIES</b>               |                                     |  |   |   |
| 35 minutes                            |                                     | <b>Activity 1: Presentation on ecosystems and food webs</b><br>1. <b>Presentation:</b> Explain to learners the importance of estuaries and oceans and how one is not possible without the other<br>2. Explain the levels of a food chain in an estuary<br>3. <b>Game: Who am I</b><br>- Each group to be provided with set of marine animal pics<br>- Groups to form a food web (primary producers, herbivorous consumers, 1 <sup>st</sup> level carnivorous consumers, 2 <sup>nd</sup> level carnivorous consumers, 3 <sup>rd</sup> level carnivorous consumers, top carnivores)<br>- Describe the role of each animal in the food chain<br>- Create a scenario that will demonstrate where humans are affecting the marine life negatively such as poaching<br>4. Pose the question – where do estuaries fit into this food chain? | Presentation, data projector, pictures (animals from a marine food chain) |   |
| <b>CONSOLIDATION &amp; EVALUATION</b> |                                     |  |   |   |
| 8 minutes                             |                                     | <b>Consolidation:</b><br>- Discuss some threats to estuaries and oceans and some possible solutions – particularly sustainable seafood and waste management.<br>- Ask learners to write actions on piece of paper and paste on wall<br>- Ask a few learners to read out loud and discuss   | Paper & prestick  |   |

|           |  |                               |                  |  |
|-----------|--|-------------------------------|------------------|--|
| 5 minutes |  | Completion of evaluation form | Evaluation forms |  |
|-----------|--|-------------------------------|------------------|--|



Seaweed-Primary Producers-



Consumers

Cockles Herbivorous



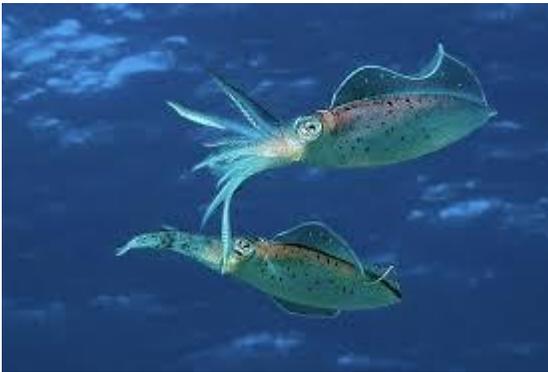
1<sup>st</sup> level Carnivorous

consumers



2<sup>nd</sup> level Carnivorous

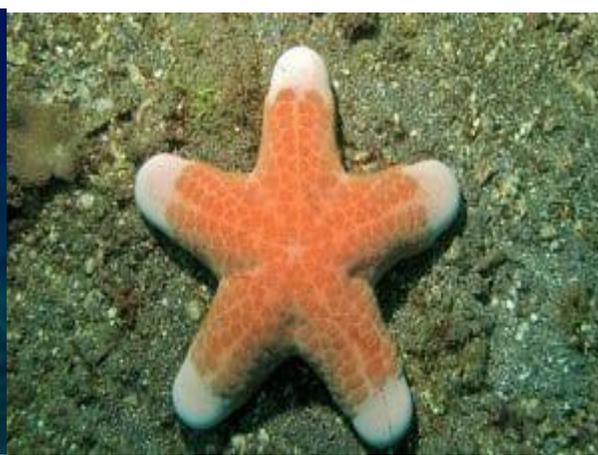
Consumers



3<sup>rd</sup> level Carnivorous consumers



Top carnivores



Decomposer

Christmas tree worm

Fire worm

Starfish