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| **Open the TI-Nspire document *Aquatic\_Food\_Web.tns***All living things need to obtain energy. In an **ecosystem**, all of the organisms depend on each other. All organisms have a role. The **producers** transfer energy into food for the **primary consumers.** The primary consumers then provide food for the **secondary consumers** then **tertiary consumers**. In this activity, you will determine which organism fits each role and identify their ecological relationships.  |  |
| **Move to page 1.2.**  |
| 1. After reading the instructions on page 1.2, close the directions box by selecting .2. Move the organisms on the left by dragging and dropping them on the correct label. If the organism correctly matches its ecosystem label the border of the label box will turn green. 3. Once the organisms are in the correct position, click on two different organisms to show their ecological connection (who eats who). There should be 10 connections.  |  |
| **Move to pages 1.3 – 1.7.** After completing the simulation on page 1.2, answer questions 1 – 4 below and/or in your .tns file.Q1. Identify the ecological relationship of each the following organism: AlgaeA. ProducerB. Primary ConsumerC. Secondary ConsumerD, Tertiary ConsumerE. DecomposerQ2. Identify the ecological relationship of each the following organism: Sea StarA. ProducerB. Primary ConsumerC. Secondary ConsumerD, Tertiary ConsumerE. DecomposerQ3. Identify the ecological relationship of each the following organism: GruntA. ProducerB. Primary ConsumerC. Secondary ConsumerD, Tertiary ConsumerE. DecomposerQ4. Identify the ecological relationship of each the following organism: DolphinA. ProducerB. Primary ConsumerC. Secondary ConsumerD, Tertiary ConsumerE. DecomposerQ5. Identify the ecological relationship of each the following organism: CrabA. ProducerB. Primary ConsumerC. Secondary ConsumerD, Tertiary ConsumerE. DecomposerQ6. Identify the ecological relationship of each the following organism: JellyfishA. ProducerB. Primary ConsumerC. Secondary ConsumerD, Tertiary ConsumerE. DecomposerQ7. What organism(s) gives the crab energy? (Multiple answers possible)A. AlgaeB. JellyfishC, Sea StarD. DolphinE. GruntQ8. What organism(s) gives the Jellyfish energy? (Multiple answers possible)A. AlgaeB. CrabC, Sea StarD. DolphinE. GruntQ9. What organism(s) gives the Sea Star energy? (Multiple answers possible)A. AlgaeB. Jelly fishC, CrabD. DolphinE. GruntQ10. What organism(s) gives the Dolphin energy? (Multiple answers possible)A. AlgaeB. JellyfishC, Sea StarD. CrabE. GruntQ11. What organism(s) gives the Grunt energy? (Multiple answers possible)A. AlgaeB. JellyfishC, Sea StarD. CrabE. DolphinQ12. What is the main source of energy for all living things?Q13. What does a food web tell us about an ecosystem?  |