iBiome Ocean: School Edition

Introduction:

iBiome-Ocean: School Edition is a game developed by Springbay Studio, a sequel to the award-winning game iBiome-Wetland. You will learn about 62 species by building 4 marine ecosystems, and study the human impact on our oceans by adding human conveniences such as cars and water bottles to their game. You will also learn what you can do to help with the environmental challenges for oceans.



Instructions:

- 1. Open a browser and go to this URL: https://schools.springbaystudio.com/log-in/
- 2. Use the user name and password provided, and click "Play" to start the game.
- 3. Go through the tutorial.
- 4. Once the tutorial finishes, you will reach the "Map" page. It has 4 domes (Tide Pool, Kelp Bed, Coral Reef, Open Sea) for you to choose. Click on any dome to start playing.
- 5. Every time you finish a level, a window with Professor Bio pops up.
 - Click on the T button to learn more about your new species. a.
 - button to see a neater version of the web you just made. Click on the b.



- button to re-arrange the food web you just made. Click on the
- d. When you are done, click on the arrow to move onto the next stage.
- 6. As you continue playing, you'll start to unlock more options on the dome screen.
- 7. On the dome screen, you'll see several buttons.
 - a. The "Map" button will lead you to the previous screen with the 4 domes.
 - Clicking on the "Badge" button will show you your badge progress. You earn badges as you play b. the game.
 - c. The "Add species to dome" button allows you to experiment with your dome by making changes to the populations of the species that live inside.
 - d. The "Build" button allows you to build and improve technologies that would normally be bad for our environment.
 - The "Journal" button shows you how much progress you've made in-game. e.
 - The "Species" tab shows you which species you have collected so far. You can even click i. on any of the species to learn more about them!
 - ii. The "Ocean & Us!" tab shows you which technologies you have built and improved so far.
 - iii. The arrows at the top lets you switch between different domes to see the progress for each one.
 - The "Task" button takes you to the next level. f.
 - button opens up a mini menu that lets you turn on/off the game sound. If you open this The g.

button, you will go back to the previous menu in the middle of a level, if you click on the page.

8. As you play, make sure to complete the charts and food webs on the following pages.

Place checkmarks in the boxes below to label them according to the categories. Some may belong in more than one category.

Environment = Env
Planktivore = Pkt
Predator = Prd

Producer = Pro Detritivore = Dtt Consumer = Con Prey = Prey

<u>Tide Pool</u>

	Env	Pro	Con	Pkt	Dtt	Pry	Prd		Env	Pro	Con	Pkt	Dtt	Pry	Prd
Sun								Barnacle							
Giant Anemone								Rough Limpet							
Tidepool Sculpin								Hermit Crab							
Detritus								Soil							
Phytoplankton								Sea Star							
Diatom Film								Water							
Zooplankton								Mussel							
Rockweed								Seagull							
Sea Lettuce								Rock Louse							
Black Oystercatcher								Lined Shore Crab							
Black Turban Snail								Hermit Crab							
Leafy Hornmouth															

Kelp Bed

	Env	Pro	Con	Pkt	Dtt	Pry	Prd		Env	Pro	Con	Pkt	Dtt	Pry	Prd
Red Sea Urchin								Sun							
Sunflower Star								Water							
Kelp Rockfish								Soil							
Kelp Greenling								Detritus							
Red Algae								Kelp Crab							
Giant Kelp								2-spot Octopus							
Sea Cucumber								Harbor Seal							
Brown Turban Snail								Sea Otter							
Red Abalone								Cabezon							

Coral Reef

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	Env	Pro	Con	Pkt	Dtt	Pry	Prd		Env	Pro	Con	Pkt	Dtt	Pry	Prd
Sun								Zooplankton							
Water								Zooxanthellae							
Soil								Tiger Shark							
Detritus								Tiger Cowrie							
Day Octopus								Cauliflower Coral							
Seagrass								Bullethead Parrotfish							
Turf Algae								Green Sea Turtle							
Ornate Seaweed								Orange Spine Unicornfish							
Peacock Grouper								Red Spotted Guard Crab							
Monk Seal								Threadfin Butterflyfish							

Open Sea

	Env	Pro	Con	Pkt	Dtt	Pry	Prd		Env	Pro	Con	Pkt	Dtt	Pry	Prd
Sun								Diatom							
Water								China Rockfish							
Dinoflagellate								Krill							
White-sided Dolphin								Chinook Salmon							
Brandt's Cormorant								Sea Lion							
Humpback Whale								Blue Whale							
Northern Anchovy								Copepod							
Market Squid								Orca							
Common Murre															

Complete the following food webs.

Use arrows to indicate the relationships between species. For example, in the relationship between a *Brown Turban Snail (prey)* and a *2-spot Octopus (predator)*, an arrow would be drawn from the *Brown Turban Snail* to the *2-spot Octopus*.



<u>Tide Pool</u>



Kelp Bed





Open Sea



Questions:

1. Pick three technologies you want to build and explain why they are bad for our environment.

2. With the same three technologies, make improvements on them. Then explain how those improvements help the environment.

3. Choose three species you are interested in and write one interesting fact for each of them.

4. Try the "Add Species To Dome" feature in any biome. Choose one of the species and add (up to 3) more to your current dome. Before pressing the "Go" button, predict what will happen. Write down your predictions. (*Hint: Are you going to see more of a certain species and less of an another?*)

5. Press the "Go" button and observe what happens. Describe the changes that are happening to your dome.