

Students names: _____

Activity 1: Fill in the missing information on "Trophic mode", "Trophic level", "Stressors" and "Predicted Impact on Reef". Choose your correct answers from the options at the bottom of the table. For trophic mode and trophic level only one term can be selected for the the other columns multiple selections may fit. Use the lecture material, the trophic pyramid diagram to complete this table.

A: $90 \leq 100\%$

B: $80 \leq 90\%$

C: $70 \leq 80\%$

D: $60 \leq 70\%$

Taxa	Trophic Mode	Trophic Level / Ecological Role	Stressors that <u>Directly</u> Impact Organisms (besides trophic shifts)	Predicted Impact on Reef (direct and indirect effects)
zooxanthellae in coral (photosynthesizers)	autotrophs	primary producer	thermal stress and salinity change	stunted coral growth / reef growth, coral bleaching, overgrowth by filamentous algae
coral without zooxanthellae (eats herbivores)	carnivore	primary consumer	salinity changes and disease	trophic shifts cause unbalance in consumer communities
parrot fish (eats coral w/ zooxanthellae)	herbivore	primary consumer	overfishing and harmful fishing practices	trophic shifts cause unbalance in consumer communities, no new creation of recolonizable space on reef, overgrowth by filamentous algae
barracuda (eats herbivores)	piscivore	secondary consumer	overfishing and harmful fishing practices	trophic shifts cause unbalance in consumer communities
reef shark (eats carnivores)	piscivore	tertiary consumer	disease and overfishing	trophic shifts cause unbalance in consumer communities
	Trophic Modes (pick one for each, best fit)	Trophic Level / Ecological Role	Known Stressors (There are many correct answers. Choose TWO)	Predicted Impact on Reef (direct and indirect effects)
Available Terms	<ul style="list-style-type: none"> - autotroph - herbivore - piscivore - carnivore 	<ul style="list-style-type: none"> - primary producer - primary consumer - secondary consumer - tertiary consumer 	<ul style="list-style-type: none"> - overfishing / harmful fishing practices - pollution (eutrophication) - disease - thermal stress - salinity change (sessile versus mobile) - sea-level rise (dependence on light) - ocean acidification (calcifying organisms) 	<ul style="list-style-type: none"> - stunted coral growth / reef growth - no new creation of recolonizable space on reef - trophic shift causing unbalance in consumer communities - overgrowth by filamentous algae