

# AUSTRALIAN MARINE DEBRIS INITIATIVE

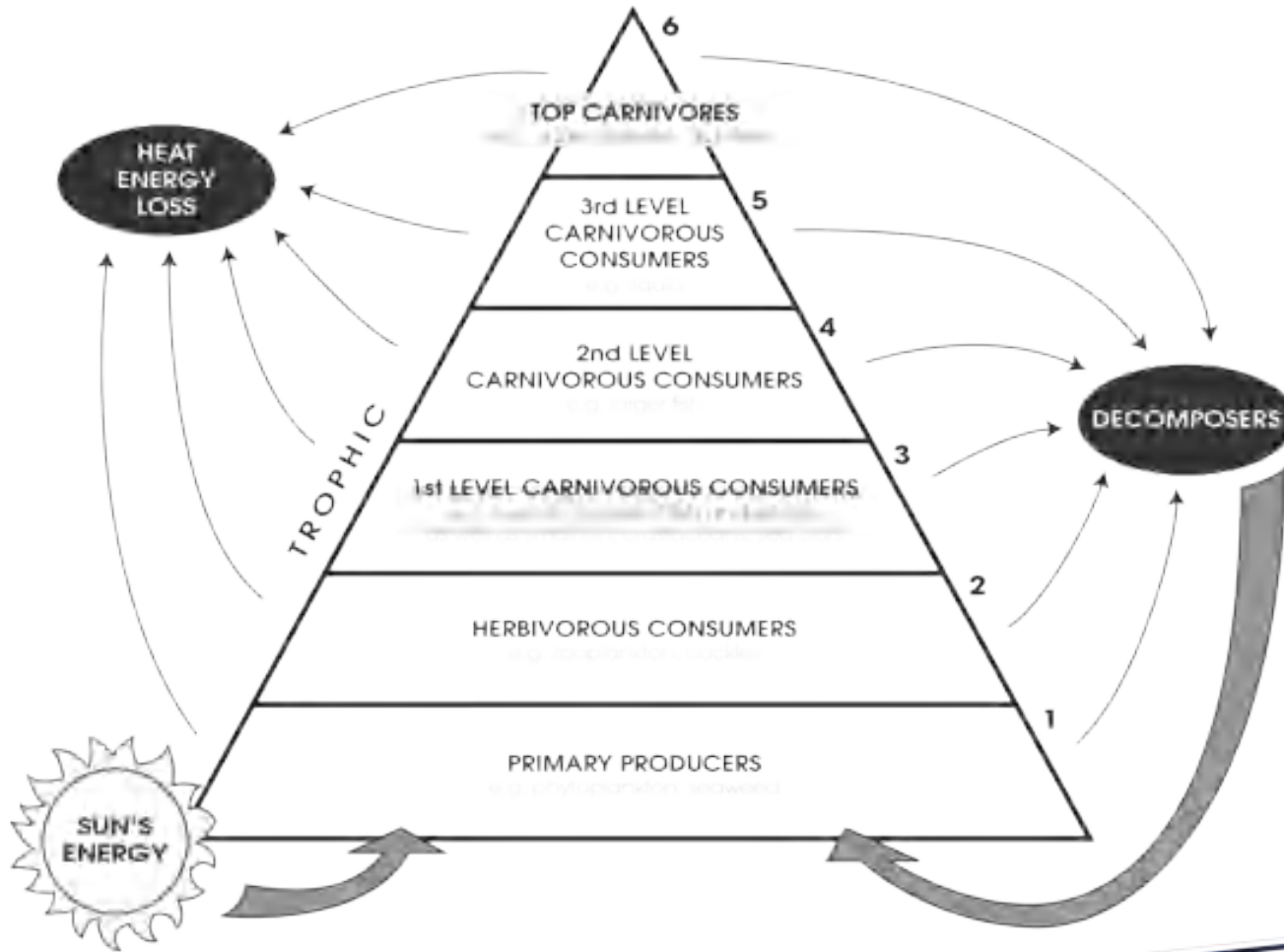


*Senior years 7-10*

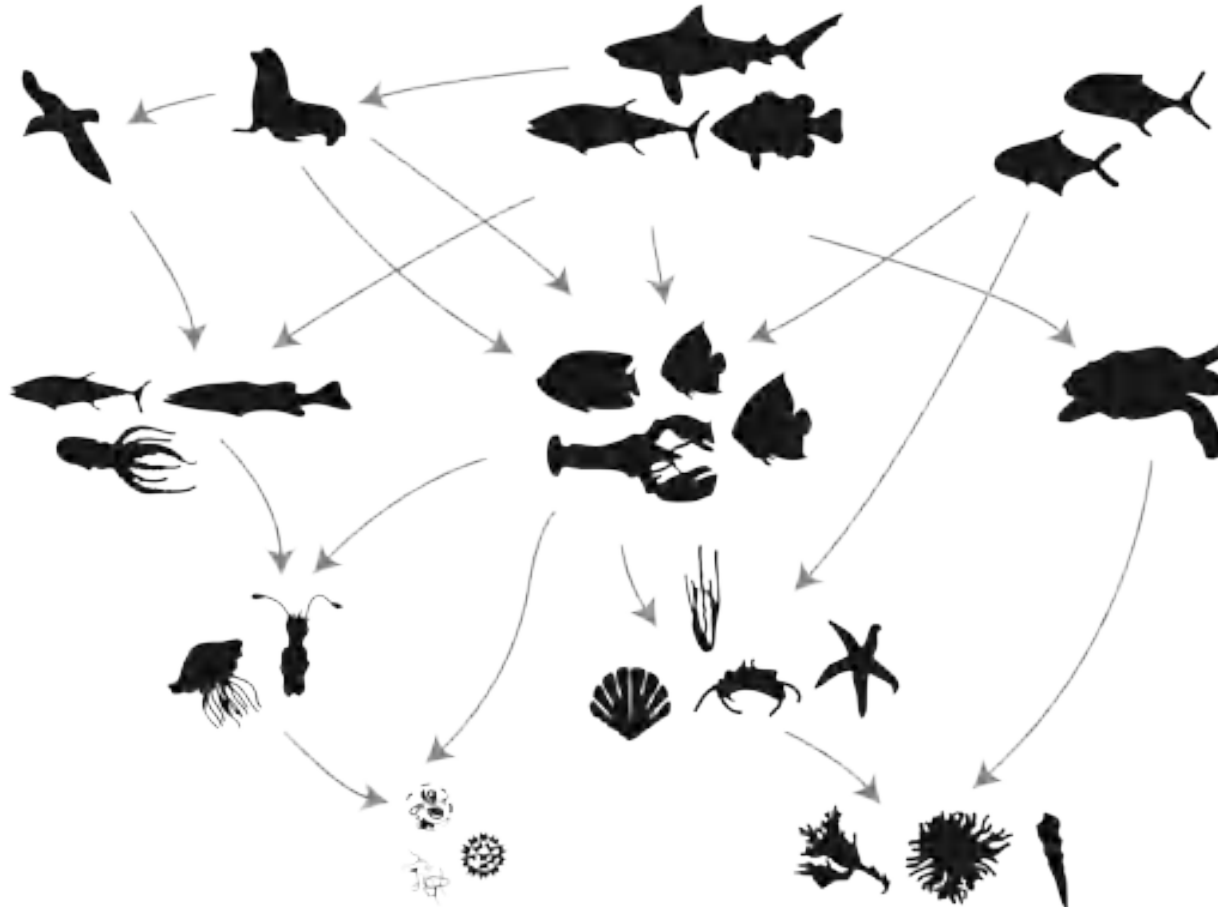
Lesson 6

## ***Plastic in our food***

# Food Pyramid Diagram



# Example of a marine food web



# Some examples of marine life that have ingested plastic



Photo: Chris Jordan

Seabird



Photo: Algalita

Rainbow runner

# Top 20 Priority Marine Debris Research Questions

*Amanda Vegter 2012 – Research topic data James Cook University*

1. What are the impacts of plastic pollution on the condition and ecological integrity of benthic habitats?
2. What are the sub-lethal (acute) impacts of exposure to plastic pollution?
3. How will climate change influence the impact and mitigation of plastic pollution?
4. What are the impacts of plastics on ecological processes in key marine and estuarine habitats?
5. What are the alternatives to plastic?
6. What are the costs and benefits of mitigating plastic pollution?
7. What are the barriers and opportunities for delivering effective education and awareness strategies?
8. How can we use structured decision making to determine mitigation strategies for reducing plastic pollution impacts and measure their effectiveness?
9. What are the social implications of plastic pollution impacts and their management?
10. How can we improve data integration to quantify risk and refine management?

## Top 20 Priority Research Questions

11. How does plastic pollution contribute to the transfer of non-native, invasive species?
12. What are the population-level impacts of plastic pollution and can they be quantified?
13. What factors drive the transport and deposition of plastic pollution in the marine environment?
14. Where are the global hotspots of accumulated plastic pollution (sinks)?
15. What and where are the main sources of plastic pollution entering the marine environment?
16. What are the species-level impacts of plastic pollution and can they be quantified?
17. What are the barriers and opportunities for developing standard approaches to quantify plastic pollution in the marine and coastal habitats?
18. How does plastic pollution impact the trophic system?
19. What types of plastics are having the greatest impact on both marine habitats and the marine environment?
20. What are the species- and population-level impacts of wildlife entanglement?

# Protect Our Oceans