





# WHO'S EATING WHO?

In the icy waters of the Southern Ocean there lurks a dangerous new THREAT. After living together and eating each other happily for eons there is now rising PANIC amongst the residents.

Huge numbers of the tiny krill,  better known as LOW LIFE, are missing, FEARED DEAD.

Is someone eating more than their fair share of the tiny krill?  Or is there something more SINISTER at work?



Krill  are a snack enjoyed by just about everyone. All of the Antarctic animals depend on this LOW LIFE for their survival. But something has upset the balance. The atmosphere is

tense. Starvation is now a very real threat. The six rival Southern Ocean gangs are watching each other closely. The FEATHERED FIENDS  are blaming the SLIPPERY CHARACTERS. 


The SLIPPERY CHARACTERS in turn are pointing their flippers at the MISTER BIGS. 

The only ones with an alibi are the phytoplankton.  These LOW LIFE are vegetarians!

But no one is above suspicion! Even the fish  and squid  are inclined to think that SOME THINGS are very FISHY!

Everyone, it seems, has a motive. The black-browed albatross,  a member of the notorious FLYING SQUAD, is known to swoop down on the krill,  gorging on hundreds of the tiny

fishy 'snacks'. And then there's the blue,  humpback  and southern right  whales, the MISTER BIGS of the sea world, who cruise through the schools of krill,

mouths agape, swallowing hundreds of thousands of them in a single gulp. Even the krill  themselves, during moments of desperation, have been known to eat their own kind.



You are the special agent called in to investigate this dastardly crime, and it's a tough assignment. Your mission, should you choose to accept it, will take you to the end of the Earth.

# This is not a simple case...

The crime scene stretches across the vast Southern Ocean with its frozen expanses of pack ice, screaming winds and towering waves.



Clues are there but you have to search carefully, rejecting false leads and closing in on the culprit or culprits! This is not a simple case. There are many possibilities.



But the krill killers are clever and have covered their tracks well.



They can strike at any time. One important clue is that several witnesses have reported unusual noises before each heist. The squid and jellyfish, not known for their investigative powers, dismissed the noise as a badly out-of-tune whale song. However some Patagonian toothfish experienced the noise at close quarters and were lucky to live to tell the tale! These survivors may have important information about the source of this sinister sound!



Carefully review all the information in this dossier, taking care to trawl for clues. Every page has an important lead. But remember this is a complex issue. There are many factors (not to mention culprits!) at work.



Your conclusions may vary from those of your classmates.



**HINT** – As a starting point for your investigation you might like to map out exactly ‘who’s eating who’. Use the information about food webs on this page as a guide.

Good luck solving one of the greatest mysteries of our time!



## WEAVING A SOUTHERN OCEAN FOOD WEB

*In the natural world the smallest animals are usually eaten by larger animals, which in turn are eaten by still larger animals. You can map just ‘who’s eating who’ in a diagram called a **FOOD WEB**. Food webs begin with plants (primary producers) – food for the first animals in the web.*

*Some animals eat only plants and are called **herbivores**. Others eat plants and animals and are called **omnivores**. Animals that eat just other animals are called **carnivores**. Food webs are finely balanced ecosystems. The loss of even one species can break the delicate threads of the web and have a serious impact on the environment.*

