

## **Antarctica Video Answers**

**Tuesday 4 November**

### **1. Skiddoo to Cape Evans**

Put your skiddoo training to good use by driving the skiddoo out to Cape Evans to visit the scientists.

1. What is the speed limit on Skiddoo in Antarctica?
  - 50 km/hour
2. How did you know where to go on the skiddoo?
  - You had to follow the flagged route
3. What is the name of the hut at Cape Evans and why is it significant?
  - Scott's Terra Nova Hut which was built in 1911 when Scott and his team came here to begin their expedition to the South Pole

Next step learning: What would you need to be careful of while travelling on the sea ice on a skiddoo?

### **2. Gearing up to Dive**

Talk to Jim from the science team about the equipment they use to dive under ice and how they stay safe.

1. What equipment is used?
  - Standard scuba gear with modifications to deal with the cold
2. What do the divers wear?
  - A dry suit with as many layers underneath as they can fit under the suit
3. How long are the dives?
  - Up to 40 minutes

Next step learning: Discuss the challenges of diving under sea ice.

### **3. SIMCO**

Find out more about what SIMCO are, where they grow and how they contribute to the food web.

1. What is SIMCO?
  - A whole community of microbes growing in and through the ice
2. How can you tell where SIMCO are growing?
  - The ice will look green or brown where SIMCO grows
3. What eats SIMCO and how does SIMCO contribute to the food web?
  - Krill which a lot of other animals rely on so SIMCO is an important producer in the Antarctic marine food web.

Next step learning: Find out how scientists know if animals are getting energy from SIMCO or phytoplankton from the open ocean.



#### **4. Sampling SIMCO**

Watch the divers collecting samples of SIMCO and listen as Jim explains the scientific process.

1. Why are the scientists collecting samples of SIMCO and photographing the ice?
  - To see how much SIMCO is growing and record where it is growing at different sites to try and estimate how much SIMCO there is in McMurdo Sound and therefore in Antarctica.
2. Where is SIMCO mostly found?
  - In areas of sea ice that are not covered by snow so more light can get through the ice and allow the SIMCO to photosynthesise
3. What would make this research more accurate?
  - More samples over lots of different sites

Next step learning: What technology could be used to help this research and why is this research important.