



Argo Floats Video Answers

Monday 23 June

1. The Life of a Young Scientist

There are nine scientists on this voyage including Denise Fernandez. Denise is a student, starting out on her career as a scientist.

- 1. Where is Denise from?
 - Answer: Argentina
- 2. What courses did Denise study at first at university?
 - Answer: physics and mathematics
- 3. What is Denise doing on this voyage?
 - Answer: observing the other oceanographers, collecting water samples and helping to analyse them
- 4. Besides working with cold water and getting sea sick what are some other challenges of being a scientist on board the *Tangaroa*?
 - Answer: working on a shift (or watches) eg 3am to 3pm.

Next step learning: Find out about other science careers that involve water (other than oceanography).

2. How does a CTD work?

The CTD is a very important piece of equipment, and Matt Walkington is the guy to talk to about it.

- 1. What are the two jobs that the CTD does?
 - Answer: takes measurements electronically and takes water samples
- 2. What is one measurement that is made using sensors?
 - Answer: (one of) temperature, salinity, dissolved oxygen
- 3. How does the electronic signal from the sensor get back to the computer onboard the *Tangaroa*?
 - Answer: it goes through the 'fish', then through the cable back to the ship
- 4. When the CTD is lowered into the water all the Niskin bottles are open and water can flow through them. How are they closed?
 - Answer: by a signal from the ship
- 5. How many Niskin bottles are there on a CTD?
 - Answer: 24
- 6. Why are there two different ways of measuring temperature, salinity and dissolved oxygen on the CTD?
 - Answer: to improve the accuracy of what is being measured
- 7. What is the major objective of this voyage?
 - Answer: Compare the information from the CTD with information from the prototype Deep Argo Floats





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Next step learning: Find out about electronic sensors that measure things about the environment. What are they used for?





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