

# MARINE ECOLOGY WITH DR GINNY EDGCOMB

## TALKING POINTS

### KNOWLEDGE:

1. How far into the Atlantis Bank gabbroic massif did the team drill?
2. Why is it important to understand marine ecosystems?

### COMPREHENSION:

3. Why does Ginny use a range of different methods in her studies?
4. What does each method enable the team to determine?

### APPLICATION:

5. What does the team need to do next to verify its findings?

### ANALYSIS:

6. Why is collaboration an essential part of Ginny's research?
7. What does Ginny's pathway to becoming a scientist tell you? Has it changed the way you view the career pathway of a scientist?

### EVALUATION:

8. Imagine you were in the middle of the Indian Ocean collecting rock samples from the below the ocean floor. Do you think you would cope with the demands? What would you find most challenging about the experience?

## ACTIVITIES YOU CAN DO IN THE CLASSROOM OR AT HOME

### D/V JOIDES RESOLUTION

The *D/V JOIDES Resolution* is the research vessel that Ginny spent three months on collecting samples for her research. The vessel has its own website and you can take a look to find out loads of interesting info about it, including details of every expedition.

- <https://joidesresolution.org/>
- There are more than 60 downloadable activities, posters and resources for educators on the site. Choose from a range of resources on climate change, plate tectonics, microbiology and careers at sea!
- There are some free video games on the *D/V JOIDES Resolution* website, including topics as varied as how dinosaurs went extinct and how microbes can live inside rocks below the seafloor.

### EXPEDITION 360

The expedition Ginny was part of was Expedition 360, also known as the Indian Ridge Moho Expedition. Loads of free materials have been published since the expedition ended, including a playlist of video logs that were filmed on board.

- <https://joidesresolution.org/expedition/360/>
- <https://joidesresolution.org/expedition-360-video-playlist/>

## MORE RESOURCES

The BBC and *Nature* also published articles about the expedition.

- [www.bbc.co.uk/news/science-environment-34967750](http://www.bbc.co.uk/news/science-environment-34967750)
- [www.nature.com/news/quest-to-drill-into-earth-s-mantle-restarts-1.18921](http://www.nature.com/news/quest-to-drill-into-earth-s-mantle-restarts-1.18921)