

## WORKSHEET 14

### Modelling Tropical Cyclones

Print and copy this worksheet for use in the classroom.

#### Objective

In this activity you will investigate tropical cyclones.

#### Equipment

- plasticine (preferably white)
- a map of Queensland, The Northern Territory or Western Australia
- cotton thread - 30 cm

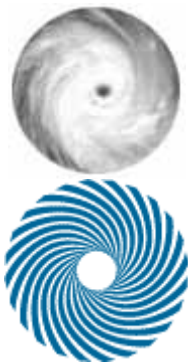
#### Procedure

Go through the following information on Modelling Tropical Cyclones ([http://www.bom.gov.au/lam/Students\\_Teachers/cycmod.shtml](http://www.bom.gov.au/lam/Students_Teachers/cycmod.shtml)) and then do the tasks and questions given below.

#### Questions

Answer the following questions in the spaces provided.

1. Make a model of a tropical cyclone using plasticine. You will place it on the map provided (see below) so use the scale from the map to help you make the cyclone the right size.
2. With the cotton thread cut off the top part of the cyclone (like you cut off the head of a mushroom). Put it back and show how the top part of the cyclone turns in the opposite direction to the bottom. Draw a diagram of your cyclone and label the 'eye'.
3. Use Figure 1 from Modelling Tropical Cyclones ([http://www.bom.gov.au/lam/Students\\_Teachers/cycmod.shtml](http://www.bom.gov.au/lam/Students_Teachers/cycmod.shtml)). Explain how the wind speed changes in different parts of a cyclone.



4. Choose a **coastal** city or town on your map. Imagine that you are newspaper reporter for that city or town's newspaper.

Give your plasticine tropical cyclone a name. Place it over the water near your coastal location.

Move your plasticine model so that it passes over your chosen location. You should see your town or city through the eye of the cyclone as it passes.

Remember to rotate your cyclone as you move it along (cyclones move in a clockwise direction at sea level, in the southern hemisphere).

Describe what you would observe as the cyclone moves across your coastal town or city. Write a news item about the damage caused, wind speed and direction, the passing of the eye, storm surge, cloud and rain.

5. Name a scientific instrument we use to help us detect and track cyclones. Explain how it helps us.

6. On the left you'll see a satellite picture of a cyclone and the Bureau of Meteorology's logo. Compare them. What do you notice? Why do you think the Bureau chose that symbol as their logo? The Bureau's Service Charter ([http://www.bom.gov.au/inside/services\\_policy/serchart.shtml](http://www.bom.gov.au/inside/services_policy/serchart.shtml)) may help you understand why it was chosen.

Below is a map of the top end of the Northern Territory. Use the scale provided to help you make your plasticine cyclone.

