

Cyclones

QUIZ

Instructions

Print copies of the following documents for students, or access the pages via the following links.

- ▶ About cyclones: <http://schools.aemi.edu.au/cyclones/about-cyclones>
- ▶ Real life cyclone stories: <http://schools.aemi.edu.au/cyclones/real-life-stories>
- ▶ Cyclones: be prepared: <http://schools.aemi.edu.au/cyclones/be-prepared>; and <http://www.cairns.qld.gov.au/community-information/cyclone-emergency-information/cyclone-faq>

Students should pay particular attention to:

- ▶ How cyclones are formed
- ▶ Severity and categories of cyclones
- ▶ The types of damage caused by Cyclones Tracy, Bobby and Larry
- ▶ How to be prepared for a cyclone

Direct students to work in pairs or individually to answer the questions below.

Suggested time: 15 minutes.

Conduct a class discussion to share students' responses to the questions.

Quiz

Q1: What's the difference between a cyclone in the southern hemisphere and a cyclone in the northern hemisphere?

A: In the northern hemisphere a cyclone is called a hurricane. In Asia a hurricane is called a typhoon. In the southern hemisphere cyclones spin clockwise. In the northern hemisphere they spin anti-clockwise

Q2: Which cyclone was Australia's most destructive?

A: Cyclone Tracy, which hit Darwin in 1974 just before Christmas

Q3: Why do cyclones have eyes and what happens in the eye of a cyclone?

A: The eye is in the centre of the cyclone and can vary in size from 10 km to 100 km, depending on the severity of the storm. Because there is the least amount of air pressure in the eye, it produces clear weather with light winds.

Q4: What happens to a cyclone's wind after the eye passes?

A: After the eye passes and the other side of the cyclone hits, the wind blows with equal strength but in the opposite direction

Q5: How does air pressure help to create a cyclone?

A: If there is low air pressure where the clouds are formed, it pulls them in and they begin to rotate. It is the earth rotating and spinning on its axis that causes the cyclone's clouds to rotate. Clouds will continue to form and begin spinning more.

Q6: Do you live in a cyclone prone area of Australia?

A: Yes, Cairns has experienced many cyclones, most recently Cyclone Ita which made landfall at Cooktown as a Category 5 cyclone (April 2014)

Q7: What are some of the things that you should do if you hear that there is a cyclone warning for your area?

A:

- ▶ Be aware of whether you live in a storm surge zone and check your nearest evacuation route - these can be found at your local council website or by contacting the Cairns Regional Council.
- ▶ Clear property of loose items or secure them. This reduces flying debris.
- ▶ Prepare a safe place in your home, or find where your nearest safe higher ground is in case you need to evacuate. Confirm where you will evacuate to if you live in an older house or storm surge zone.
- ▶ Assemble your household emergency kit, tinned food, water, medicines, important documents, torches, candles and matches, portable radio and batteries.
- ▶ Confirm your household emergency plan with your family. Decide on the safest places in the house in the event of a cyclone, and ensure that your emergency kit is easily accessible to all family members. Make sure a list of emergency contacts is clearly visible and a copy is in the emergency kit.

Q8: What do the categories of a cyclone mean?

A: Cyclones are categorised according to their strength. There are five categories: Category 1 is the weakest and Category 5 is the strongest.

Q9: What do you think you can do AFTER the cyclone has passed to ensure that you and your family are safe?

A:

- ▶ Check for fallen powerlines
- ▶ Stay out of flood water
- ▶ Don't go outside or home until the all-clear has been given
- ▶ Be considerate of other people and how they are feeling after the cyclone.

Students may have a variety of other suitable responses.

Q10: What types of food SHOULD you choose to have in your household emergency kit?

A:

- ▶ food that has a long shelf life – e.g. canned/ dried food
- ▶ food that is ready to eat/ pre-prepared
- ▶ food and drinks you enjoy!
- ▶ Long life milk and other drinks
- ▶ camp stove for preparing food without electricity
- ▶ esky and ice to help preserve food in your fridge if the power fails

Curriculum links

7	Science	ACSHE121: Science as a Human Endeavour; Use and influence of science	People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity
7	Geography	ACHGK042: Knowledge and Understanding	Causes, impacts and responses to an atmospheric or hydrological hazard
7	Geography	ACHGS053: Geographical Inquiry and Skills; Communicating	Present findings, arguments and ideas in a range of communication forms selected to suit a particular audience and purpose; using geographical terminology and digital technologies as appropriate
7	Humanities & Social Sciences	ACHASSK185: Knowledge and Understanding Geography	The nature of water scarcity and ways of overcoming it, including studies drawn from Australia and West Asia and/or North Africa
7-8	Health & Physical Education	ACPPS072: Personal, Social and Community health; Being healthy, safe and active	Practise and apply strategies to seek help for themselves or others
7-8	Health & Physical Education	ACPPS073: Personal, Social and Community health; Being healthy, safe and active	Investigate and select strategies to promote health, safety and wellbeing
7-8	Health & Physical Education	ACPPS077: Personal, social and community health; Contributing to healthy and active communities	Plan and use health practices, behaviours and resources to enhance health, safety and wellbeing of their communities
8	Science	ACSHE136: Science as a Human Endeavour; Use and Influence of Science	People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity
8	Geography	ACHGK053: Knowledge and Understanding; Biomes and food security	Causes, impacts and responses to geomorphical hazards
9	Geography	ACHGK063 Knowledge and Understanding: Biomes and food security	Challenges to food production, including land and water degradation, shortage of fresh water, competing land uses and climate change, for Australia and other areas of the world
9-10	Health & Physical Education	ACPPS091: Personal, Social and Community health: Being healthy, safe and active	Plan, rehearse and evaluate options (including CPR and first aid) for managing situations where their own or others' health, safety and wellbeing may be at short or long term risk

Classroom activity

Classroom resources provided by Cairns Regional Council



9-10	Health & Physical Education	ACPPS096: Personal, social and community health; Contributing to healthy and active communities	Plan, implement and critique strategies to enhance health, safety and wellbeing of their communities
10	Geography	ACHGK074: Knowledge and Understanding: Environmental change & management	The application of geographical concepts and methods to the management of the environmental change being investigated
10	Geography	ACHGK075: Knowledge and Understanding: Environmental change & management	The application of environmental, economic and social criteria in evaluating management responses to the change

Cyclones quiz

- ▶ Read the articles about cyclones provided by your teacher
- ▶ Make notes on key points of the articles
- ▶ Read the questions below and provide answers in the space provided following completion of the article
- ▶ Participate in the class discussion by sharing and comparing your answers to the questions with your classmates.

Q1: What's the difference between a cyclone in the southern hemisphere and a cyclone in the northern hemisphere?

Q2: Which cyclone was Australia's most destructive?

Q3: Why do cyclones have eyes and what happens in the eye of a cyclone?

Q4: What happens to a cyclone's wind after the eye passes?

Q5: How does air pressure help to create a cyclone?

Q6: Do you live in a cyclone prone area of Australia? What is the greatest danger for Cairns?

Q7: What are some of the things that you should do if you hear that there is a cyclone warning for your area?

Q8: What do the categories of a cyclone mean?

Q9: What do you think you can do AFTER the cyclone has passed to ensure that you and your family are safe?

Q10: What types of food SHOULD you choose to have in your household emergency kit?
