

Cyclones

CYCLONE 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 10km to 100km, 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 on the Cairns Regional Council website: www.cairns.qld.gov.au/stormsurge
- ▶ 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

3	Science	ACSHE051: Science as a Human Endeavour; Use and influence of science	Science knowledge helps people to understand the effect of their actions
3-4	Health & Physical Education	ACPPS035: Science Personal, Social and Community Health; Being healthy, safe and active	Describe and apply strategies that can be used in situations that make them feel uncomfortable or unsafe
3-4	Health & Physical Education	ACPPS036: Personal, Social and Community Health; Being healthy, safe and active	Identify and practice strategies to promote health, safety and wellbeing
4	Science	ACSSU075: Earth and Space Sciences; Nature and development of science	Science involves making predictions and describing patterns and relationships
4	Science	ACSHE062: Science as a Human Endeavour; Use and influence of science	Science knowledge helps people to understand the effect of their actions
4-6	Health & Physical Education	ACPPS057: Personal, Social and Community Health; Communicating and interacting with health and wellbeing	Recognise how media and important people in the community influence personal attitudes, beliefs, decisions and behaviours
5	Science	ACSHE083 Science as a Human Endeavour; Use and influence of science	Scientific knowledge is used to solve problems and inform personal and community decisions
5	Geography	ACHASSK114: Knowledge and Understanding	The impact of bushfires or floods on environments and communities, and how people can respond
5-6	Health & Physical Education	ACPPS054: Personal, Social and Community Health; Being healthy, safe and active	Plan and practice strategies to promote health, safety and wellbeing
6	Science	ACSSU096: Science understanding; Earth and space sciences	Sudden geological changes and extreme weather events can effect Earth's surface
6	Science	CSHE098: Science as a Human Endeavour; Nature & development of science	Science involves testing predictions by gathering data and using evidence to develop explanations or events and phenomena
6	Science	ASHE099: Science as a Human Endeavour; Nature and development of science	Important contributions to the advancement of science have been made by people from a range of cultures
6	Science	ACSHE100: Science as a Human Endeavour; Use and influence of science	Scientific understandings, discoveries and inventions are used to solve problems that directly affect peoples' lives

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
- ▶ 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?
