

Using a Concept Definition Map

1. Set Expectations

Print “Disaster” on the board. Tell students, *You are going to come up with as many words as you can that are related to the word “disaster,” and then we’ll put these ideas together to get a really good sense of what a thing has to be in order to be labeled a natural disaster.* Help students understand how this activity connects to what they are studying. Say: *Today’s activities will help us review all that we learned about disasters from reading Do Tornadoes Really Twist.*

2. Motivate and Focus

Ask students to define the word “disaster.” (A disaster is an event that causes a lot of damage and harm.) Ask: *What does it mean to say a tornado is a “natural disaster?”* (It’s a disaster caused by nature.) *Today, we are going to brainstorm different kinds of natural disasters.*

3. Teach/Model

Tell students: *First, I am going to put the words “natural disaster” in the center of this map. This map is going to help us pull together all the pieces of our ideas about natural disasters. Now, I want you to think of some examples of natural disasters. List these examples on chart paper hanging next to map. As volunteers name disasters, ask them what they know about each ones. What is it? Have they ever experienced it? Have they seen it on television or in movies? Use students’ explanations to write a brief definition beside each word.*

Students may say things like:

- | | |
|---------------|------------------|
| • Blizzard | • Cyclone |
| • Drought | • Earthquake |
| • Forest fire | • Hurricane |
| • Tornado | • Tropical storm |
| • Tsunami | • Twister |
| • Typhoon | • Volcano |

Tell Students: *Since there are only three spaces on the map for examples, I am going to pick three from our list to add to the chart.*

Grade Level: Multi-grade (3–5)

Curriculum Area/Theme/Unit:
Language Arts—Vocabulary

Materials:

- Chart paper copy or transparency of Concept Definition Map
- List of Natural Disasters” (attached)
- Copies of Concept Definition Map—one for each student for in-class use, and one for homework (attached)

Grouping:

- Whole class
- Small groups

Standards:

- Ability to identify attributes of a specific concept
- Ability to identify examples of a specific concept

Lesson Objectives:

Students will:

- Brainstorm examples of “natural disasters.”
- Define concept of natural disaster.
- List properties of natural disaster.
- Learn how a concept definition map can help them learn a new concept.

Assessment Options:

- Assess students as they volunteer examples, properties, and definitions of concept.
- Assess students as they complete their own concept definition map on the word “city.”
- Assess the map students complete for homework.

Lesson Plan ■ *Using a Concept Definition Map*

Ask students: *Based on what you said about each disaster, and looking at the three we have on the chart, we can see that they have similarities and differences. For now, I want you to think about what the similarities are among them. What makes all of them natural disasters? What can be true about each one of them? Turn to a partner and talk about their similarities for about three minutes.*

To guide students' thinking, ask: *What happens to the earth during and after one of these disasters?* After a few minutes, focus their attention back to the chart and ask for volunteers to share their ideas. List their responses on chart paper next to map. Discuss each point and decide, as a group, if what is said is true of all natural disasters. Some correct responses may be: destroys buildings; can kill crops, animals, and people; can be unpredictable; and are very frightening.

Say: *Let's quickly go over what we have on our map. First we started with the words "natural disaster." Then we brainstormed some examples of these disasters. Next, we thought about all the things these disasters have in common. Now, we are going to categorize what a natural disaster is and create a statement to go at the top of the map. Take two minutes to discuss with a partner how you would categorize or label what a natural disaster is.*

After a few minutes, ask for volunteers to categorize the term "natural disaster". Write responses on chart paper. Have a discussion on which category should be added to the chart. A sample category might say: something bad that happens to the Earth.

Say: *Now that we know examples of natural disasters, as well as what they have in common, let's think about how we can put that information together and make a definition for this concept. Take a minute to think about how you would put this information together. Use the information on the map as a guide.*

Take several responses and write them on the chart paper. A typical response might be: something that happens to the Earth or is created by the Earth that can harm the land as well as people, animals, and plants.

Review the steps you took to fill out the map and post them on the board.

1. List examples of the concept and talk about each one.
2. Put three examples on the map.
3. Talk about the similarities among the examples.
4. As a group, create a category for the concept.

4. Practice With Teacher Direction

Have the class break into groups and tell them that they are going to practice filling in their own map. Distribute copies of a blank form and tell them that they are going to work on a concept definition map using the word “city” as their concept word.

Remind them to use the other map as a guide for filling out the one on the city.

As you circulate among the groups, encourage them with phrases such as:

- “What ties all these examples together?”
- “Are you sure that all these examples share this similarity?”
- “Does everyone in the group agree with this category?”

5. Recap/Wrap-up

Have students share their concept maps. Each small group should explain how they came up with their properties for the concept of a city.

Ask:

- *If you had to explain to a younger child why a concept map was useful, what would you say? (Concept maps can help you label similar characteristics of a concept and make it easier for you to get a good sense of its entire meaning.)*
- *Would it help to fill out a map for every new word or concept we learn? Why was it helpful to complete this chart? How did this activity help you develop a better understanding for the word “disasters”?*

6. Independent Practice

Distribute blank copies of the concept definition web for homework. Have each student choose a new word related to their independent reading text and web it.

Natural Disaster Definitions

- 1 **Blizzard:** a severe storm with very cold strong winds and a lot of snow, most common in the western U.S.
- 2 **Cyclone:** an area of low pressure surrounding by strong blowing winds that cause storms. Hurricanes and typhoons are kinds of cyclones.
- 3 **Drought:** abnormally dry weather that damages crops and causes reservoirs and wells to dry up
- 4 **Earthquake:** a shaking of the Earth's surface. Earthquakes happen when energy stored in the rocky layer under Earth's surface is released in waves.
- 5 **Forest Fire:** also called "wildland fires" are spread by the transfer of heat in grass, brush, shrubs, and trees.
- 6 **Hurricane:** a severe rainstorm that is actually a type of cyclone. It starts over oceans near the equator, especially near the West Indies, Caribbean Sea and Gulf of Mexico.
- 7 **Tornado:** a very strong windstorm that usually forms over land, and looks like a spinning funnel coming from a dark cloud. It usually has little rain.
- 8 **Tropical Storm:** a strong rainstorm (not as violent as a hurricane) that starts over oceans and seas near the equator.
- 9 **Tsunami:** a huge wave caused by an earthquake, volcanoes or landslides under an ocean or sea.
- 10 **Twister:** an informal term for tornado.
- 11 **Typhoon:** a type of cyclone that starts over the northwestern Pacific Ocean
- 12 **Volcano:** a mountain or hill formed by the build-up of ash and lava through one or more openings (or vents) in the surface of the earth.

Name

Date

GRAPHIC ORGANIZER

Concept Definition Map

What is it?

(category)

What is it like?

(property)

(property)

(property)

(property)

What are some examples?

(illustration)

(illustration)

(illustration)

New Definition:

Name

Date

GRAPHIC ORGANIZER

Concept Definition Map

What is it?

*Something bad that happens
to the Earth naturally*

(category)

What is it like?

People cannot stop them

(property)

Break and destroy houses

(property)

*Harmful to plants, animals,
and people*

(property)

Can be unpredictable

(property)

Natural Disaster

(concept)

**What
are some
examples?**

Earthquake

(illustration)

Hurricane

(illustration)

Tornado

(illustration)

New Definition:

Something that is created by the Earth that is harmful to people, plants, and animals.