



Assessing Vulnerability and Risk to Natural Disasters in My Community

Student Activity Sheet

What's Vulnerable?

1. List an important place in your community in each row of **column A** below (you will have a total of five places). The places could be specifically important to you (like your home) or could be important to the community (like a hospital, community center, or shop).
2. If a natural disaster (e.g., flood, wildfire, drought) affects your area, are the important places exposed, or in harm's way? Decide whether each place is very exposed, somewhat exposed, or not exposed to this particular natural disaster and circle an answer in **column B** for each location.
3. Can the places, and people in them, withstand this disaster event? Estimate whether each place could physically withstand the natural disaster (**column C**) and whether the people in that place are able to handle it (**column D**).
4. To estimate vulnerability, add the numbers from columns B, C, and D together and put the totals for each row into **column E**. The places that are most vulnerable will have the highest numbers. The places that are least vulnerable will have the lowest numbers.

Type of natural disaster I am assessing vulnerability to: _____

A	B	C	D	E
Places in your community that you value	Is the place in harm's way? (circle one)	Could the place physically withstand this natural disaster? (circle one)	Are people in the place able to handle this natural disaster? (circle one)	Vulnerability Rating (Add the numbers from B+C+D together.)
	Very exposed (3) Somewhat exposed (2) Not exposed (1)	Yes, very well (1) Some damage (2) Probably not (3)	Yes, very well (1) It may be difficult (2) Probably not (3)	
	Very exposed (3) Somewhat exposed (2) Not exposed (1)	Yes, very well (1) Some damage (2) Probably not (3)	Yes, very well (1) It may be difficult (2) Probably not (3)	
	Very exposed (3) Somewhat exposed (2) Not exposed (1)	Yes, very well (1) Some damage (2) Probably not (3)	Yes, very well (1) It may be difficult (2) Probably not (3)	
	Very exposed (3) Somewhat exposed (2) Not exposed (1)	Yes, very well (1) Some damage (2) Probably not (3)	Yes, very well (1) It may be difficult (2) Probably not (3)	
	Very exposed (3) Somewhat exposed (2) Not exposed (1)	Yes, very well (1) Some damage (2) Probably not (3)	Yes, very well (1) It may be difficult (2) Probably not (3)	



Which Place is Most Vulnerable in My Community?

In the spaces below, make a claim about which of the five places you assessed on the previous page is most vulnerable, and then support your claim with evidence and reasoning that describes why it's vulnerable.

Type of natural disaster I am assessing vulnerability to: _____

Make a claim.

Which place (from the five on the previous page) is most vulnerable to this type of natural disaster?

Cite evidence.

What's your evidence that this place is vulnerable to this natural disaster?

Share your reasoning.

Why does the evidence suggest that it is vulnerable?



What's At Risk?

1. What would be the consequences if each place is destroyed? List the **same places (column A)** and **vulnerability ratings (column E)** that you included in your **What's Vulnerable?** table.
2. **Estimate the consequences** if the place were destroyed in **column F**.
3. Calculating risk takes into account the vulnerability to an event, the consequences if destroyed, and the probability that the event will happen. We are exploring the risk associated with a particular type of natural disaster under current conditions as well as what this risk may be in the future. The risk of many types of natural disasters is increasing due to climate change.
 - › To calculate the **risk now (column G)**, add vulnerability and consequences (E and F) and then multiply by two.
 - › To calculate the **risk in 2050 (column H)**, add vulnerability and consequences (E and F) and then multiply by three (because there will be a high probability of a damaging natural disaster in the future.)

Type of natural disaster I am assessing risk of: _____

A	E	F	G	H
Places in your community that you value	Vulnerability Rating	Estimate of consequences if destroyed (circle one)	Risk now based on medium probability (E+F)*2	Risk 2050 based on high probability (E+F)*3
		Low (1) Medium (2) High (3)		
		Low (1) Medium (2) High (3)		
		Low (1) Medium (2) High (3)		
		Low (1) Medium (2) High (3)		
		Low (1) Medium (2) High (3)		