

Name: _____

CH 13 The Nature of Storms

SECTION 4 Recurrent Weather

MAIN IDEA	DETAILS
Review Vocabulary	<i>Use your text to define the following term.</i>
<i>Fahrenheit scale</i>	_____

New Vocabulary	<i>Use your text to define each term.</i>
<i>drought</i>	_____

<i>heat wave</i>	_____

<i>cold wave</i>	_____

<i>wind-chill index</i>	_____

MAIN IDEA**Flood and Droughts***Use with pages 361–362***DETAILS****Compare and contrast** *floods and droughts.*

	Definition	Cause	Impact
Flood			
Drought			

Heat waves and Cold Waves*Use with pages 362–365.***Compare and contrast** *heat waves and cold waves.*

	Heat Waves	Cold Waves
Cause		
Other Factors		

WIND CHILL INDEX

		Air Temperature (F)																
		35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
Wind Speed (miles per hour)	0-4	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
	5	32	27	22	16	11	6	0	-5	-10	-15	-21	-26	-31	-36	-42	-47	-52
	10	22	16	10	3	-3	-9	-15	-22	-27	-34	-40	-46	-52	-58	-64	-71	-77
	15	16	9	2	-5	-11	-18	-25	-31	-38	-45	-51	-58	-65	-72	-78	-85	-92
	20	12	4	-3	-10	-17	-24	-31	-39	-46	-53	-60	-67	-74	-81	-88	-95	-103
	25	8	1	-7	-15	-22	-29	-36	-44	-51	-59	-66	-74	-81	-88	-96	-103	-110
	30	6	-2	-10	-18	-25	-33	-41	-49	-56	-64	-71	-79	-86	-93	-101	-109	-116
	35	4	-4	-12	-20	-27	-35	-43	-52	-58	-67	-74	-82	-89	-97	-105	-113	-120
	40	3	-5	-13	-21	-29	-37	-45	-53	-60	-69	-76	-84	-92	-100	-107	-115	-123
	45	2	-6	-14	-22	-30	-38	-46	-54	-62	-70	-78	-85	-93	-102	-109	-117	-125

1. What is the wind chill factor?

2. What are the limitations of the wind chill index?

3. What do the numbers in the top row of the index indicate?

4. What do the numbers in the left-hand column indicate?

5. What is the wind chill index if the air temperature is 20°F and the wind speed is 10 mph?

6. If actual air temperature remains the same, how does an increase in wind speed affect the wind chill index?

7. If the wind speed remains the same, how does a decrease in actual air temperature affect the wind chill index?

8. If the wind chill index is -51°F and the actual air temperature is -15°F , what is the wind speed?

9. If the wind chill index is -52°F and the wind speed is 35 mph, what is the actual air temperature?
