## Science 1206 Unit 2: Weather Dynamics

Worksheet 6: Wind

\_\_\_\_

**Atmosphere** is the blanket of air and moisture that surrounds the earth.

Air refers to the invisible gaseous substance surrounding the earth, a mixture

mainly of oxygen and nitrogen.

Wind refers to the movement of air in the atmosphere

**Anemometer** is used to measure wind speed. It is measured in km/hr.

Wind Vane is used to measure direction. It indicates the direction of the wind is from

the East, West, North or South . A -Wind Sock can also be used to

measure wind direction.

Wind Chill refers to a cooling sensation that is caused by the combined effect of

temperature and wind.

Temp	Windchill (Celsius) at Windspeed in km/h												
[c]	10	20	30	40	50	60	70	80	90	100			
-20	-27,2	-30,5	-32,6	-34,1	-35,4	-36,5	-37,4	-38,2	-39,0	-39,6			
-18	-24,8	-28,0	-30,0	-31,5	-32,7	-33,7	-34,6	-35,4	-36,1	-36,7			
-16	-22,4	-25,4	-27,3	-28,8	-29,9	-30,9	-31,8	-32,5	-33,2	-33,8			
-14	-20,0	-22,9	-24,7	-26,1	-27,2	-28,2	-29,0	-29,7	-30,3	-30,9			
-12	-17,7	-20,4	-22,1	-23,4	-24,5	-25,4	-26,2	-26,9	-27,5	-28,0			
-10	-15,3	-17,9	-19,5	-20,8	-21,8	-22,6	-23,4	-24,0	-24,6	-25,1			
-8	-12,9	-15,3	-16,9	-18,1	-19,0	-19,9	-20,5	-21,2	-21,7	-22,2			
-6	-10,5	-12,8	-14,3	-15,4	-16,3	-17,1	-17,7	-18,3	-18,9	-19,3			
-4	-8,1	-10,3	-11,7	-12,7	-13,6	-14,3	-14,9	-15,5	-16,0	-16,4			
-2	-5,7	-7,8	-9,1	-10,1	-10,9	-11,5	-12,1	-12,6	-13,1	-13,5			
0	-3,3	-5,2	-6,5	-7,4	-8,1	-8,8	-9,3	-9,8	-10,2	-10,6			
2	-0,9	-2,7	-3,9	-4,7	-5,4	-6,0	-6,5	-7,0	-7,4	-7,7			
4	1,5	-0,2	-1,3	-2,0	-2,7	-3,2	-3,7	-4,1	-4,5	-4,8			
6	3,9	2,3	1,4	0,6	0,0	-0,5	-0,9	-1,3	-1,6	-1,9			
8	6,2	4,9	4,0	3,3	2,8	2,3	1,9	1,6	1,3	1,0			
10	8,6	7,4	6,6	6,0	5,5	5,1	4,7	4,4	4,1	3,9			

## **PART A: MULTIPLE CHOICE**

Instructions: Shade the letter of the correct answer on the computer scorable answer sheet provided

- 1. Which of the following is the horizontal movement of air across the surface of the earth?
  - (A) Air pressure
  - (B) Drizzle
  - (C) Cloud
  - (D) Wind
- 2. Wind speed is usually expressed in which of the following units?
  - (A) mm
  - (B) °C
  - (C) km/hr
  - (D) kPa

(A) Anemometer (B) Barometer (C) Thermometer (D) Wind Vane  4. What does a wind vane measure?  (A) Wind Direction (B) Wind Duration (C) Wind Speed (D) Wind Velocity  5. What is a northern wind?  (A) Blows away from the south (B) Blows towards the north (C) Comes from the north (D) Heads towards the north  6. Which of the following is the method used by weather forecasters to tell us how me colder the wind makes unprotected skin feel?  (A) Heat index (B) Minimum temperature (C) Wind chill temperature (D) Wet-bulb temperature  7. What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr?  (A) -10°c (B) -2°C (C) 2 °C (D) 10°C  PART B: WRITTEN RESPONSE	3.	What	t instrument is used to measure the speed of wind?						
(B) Barometer (C) Thermometer (D) Wind Vane  4. What does a wind vane measure?  (A) Wind Direction (B) Wind Duration (C) Wind Speed (D) Wind Velocity  5. What is a northern wind?  (A) Blows away from the south (B) Blows towards the north (C) Comes from the north (D) Heads towards the north  6. Which of the following is the method used by weather forecasters to tell us how mean colder the wind makes unprotected skin feel?  (A) Heat index (B) Minimum temperature (C) Wind chill temperature (D) Wet-bulb temperature  7. What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr?  (A) -10°c (B) -2°C (C) 2 °C (D) 10°C  PART B: WRITTEN RESPONSE  8. (A) Give an example of why knowing the forecast of wind is important? [									
(C) Thermometer (D) Wind Vane  4. What does a wind vane measure?  (A) Wind Direction (B) Wind Duration (C) Wind Speed (D) Wind Velocity  5. What is a northern wind?  (A) Blows away from the south (B) Blows towards the north (C) Comes from the north (D) Heads towards the north  6. Which of the following is the method used by weather forecasters to tell us how me colder the wind makes unprotected skin feel?  (A) Heat index (B) Minimum temperature (C) Wind chill temperature (D) Wet-bulb temperature  7. What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr?  (A) -10°c (B) -2°C (C) 2 °C (D) 10°C  PART B: WRITTEN RESPONSE  8. (A) Give an example of why knowing the forecast of wind is important? [									
(D) Wind Vane  4. What does a wind vane measure?  (A) Wind Direction (B) Wind Duration (C) Wind Speed (D) Wind Velocity  5. What is a northern wind?  (A) Blows away from the south (B) Blows towards the north (C) Comes from the north (D) Heads towards the north  6. Which of the following is the method used by weather forecasters to tell us how meaning to be a superfected skin feel?  (A) Heat index (B) Minimum temperature (C) Wind chill temperature (D) Wet-bulb temperature  7. What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr?  (A) -10°c (B) -2°C (C) 2 °C (D) 10°C  PART B: WRITTEN RESPONSE  8. (A) Give an example of why knowing the forecast of wind is important? [									
4. What does a wind vane measure?  (A) Wind Direction (B) Wind Duration (C) Wind Speed (D) Wind Velocity  5. What is a northern wind?  (A) Blows away from the south (B) Blows towards the north (C) Comes from the north (D) Heads towards the north  6. Which of the following is the method used by weather forecasters to tell us how mean colder the wind makes unprotected skin feel?  (A) Heat index (B) Minimum temperature (C) Wind chill temperature (D) Wet-bulb temperature  7. What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr?  (A) -10°c (B) -2°C (C) 2 °C (D) 10°C  PART B: WRITTEN RESPONSE  8. (A) Give an example of why knowing the forecast of wind is important? [									
(A) Wind Direction (B) Wind Duration (C) Wind Speed (D) Wind Velocity  5. What is a northern wind?  (A) Blows away from the south (B) Blows towards the north (C) Comes from the north (D) Heads towards the north  6. Which of the following is the method used by weather forecasters to tell us how me colder the wind makes unprotected skin feel?  (A) Heat index (B) Minimum temperature (C) Wind chill temperature (D) Wet-bulb temperature  7. What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr?  (A) -10°c (B) -2°C (C) 2°C (D) 10°C  PART B: WRITTEN RESPONSE  8. (A) Give an example of why knowing the forecast of wind is important? [		(D)	wind vane						
(B) Wind Duration (C) Wind Speed (D) Wind Velocity  5. What is a northern wind?  (A) Blows away from the south (B) Blows towards the north (C) Comes from the north (D) Heads towards the north  6. Which of the following is the method used by weather forecasters to tell us how me colder the wind makes unprotected skin feel?  (A) Heat index (B) Minimum temperature (C) Wind chill temperature (D) Wet-bulb temperature  7. What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr?  (A) -10°c (B) -2°C (C) 2 °C (D) 10°C  PART B: WRITTEN RESPONSE  8. (A) Give an example of why knowing the forecast of wind is important? [	4.	What	does a wind vane measure?						
(C) Wind Speed (D) Wind Velocity  5. What is a northern wind?  (A) Blows away from the south (B) Blows towards the north (C) Comes from the north (D) Heads towards the north  6. Which of the following is the method used by weather forecasters to tell us how me colder the wind makes unprotected skin feel?  (A) Heat index (B) Minimum temperature (C) Wind chill temperature (D) Wet-bulb temperature  7. What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr?  (A) -10°c (B) -2°C (C) 2 °C (D) 10°C  PART B: WRITTEN RESPONSE  8. (A) Give an example of why knowing the forecast of wind is important? [									
(D) Wind Velocity  5. What is a northern wind?  (A) Blows away from the south (B) Blows towards the north (C) Comes from the north (D) Heads towards the north  6. Which of the following is the method used by weather forecasters to tell us how mucolder the wind makes unprotected skin feel?  (A) Heat index (B) Minimum temperature (C) Wind chill temperature (D) Wet-bulb temperature  7. What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr?  (A) -10°c (B) -2°C (C) 2 °C (D) 10°C  PART B: WRITTEN RESPONSE  8. (A) Give an example of why knowing the forecast of wind is important? [									
5. What is a northern wind?  (A) Blows away from the south (B) Blows towards the north (C) Comes from the north (D) Heads towards the north  6. Which of the following is the method used by weather forecasters to tell us how me colder the wind makes unprotected skin feel?  (A) Heat index (B) Minimum temperature (C) Wind chill temperature (D) Wet-bulb temperature  7. What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr?  (A) -10°C (B) -2°C (C) 2 °C (D) 10°C  PART B: WRITTEN RESPONSE  8. (A) Give an example of why knowing the forecast of wind is important? [									
(A) Blows away from the south (B) Blows towards the north (C) Comes from the north (D) Heads towards the north  6. Which of the following is the method used by weather forecasters to tell us how mucolder the wind makes unprotected skin feel?  (A) Heat index (B) Minimum temperature (C) Wind chill temperature (D) Wet-bulb temperature  7. What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr?  (A) -10°c (B) -2°C (C) 2°C (D) 10°C  PART B: WRITTEN RESPONSE  8. (A) Give an example of why knowing the forecast of wind is important? [		(D)	Wind Velocity						
(B) Blows towards the north (C) Comes from the north (D) Heads towards the north (E) Heads towards the north (D) Heads towards the north (E) Heads towards the north (E) Which of the following is the method used by weather forecasters to tell us how me colder the wind makes unprotected skin feel? (E) Wind chill temperature (C) Wind chill temperature (D) Wet-bulb temperature (D) Wet-bulb temperature (E) What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr? (E) Heads towards the north (E) Wind chill temperature (D) Wet-bulb temperature (E) What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr? (E) Heads towards the north (E) Wind chill temperature (E) What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr? (E) Heads towards the north (E) Wind chill temperature (E) What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr? (E) Heads towards the north	5.	What	is a northern wind?						
(C) Comes from the north (D) Heads towards the north  6. Which of the following is the method used by weather forecasters to tell us how mucolder the wind makes unprotected skin feel?  (A) Heat index (B) Minimum temperature (C) Wind chill temperature (D) Wet-bulb temperature  7. What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr?  (A) -10°c (B) -2°C (C) 2 °C (D) 10°C  PART B: WRITTEN RESPONSE  8. (A) Give an example of why knowing the forecast of wind is important? [		(A)	· · · · · · · · · · · · · · · · · · ·						
(D) Heads towards the north  6. Which of the following is the method used by weather forecasters to tell us how method the wind makes unprotected skin feel?  (A) Heat index (B) Minimum temperature (C) Wind chill temperature (D) Wet-bulb temperature  7. What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr?  (A) -10°c (B) -2°C (C) 2 °C (D) 10°C  PART B: WRITTEN RESPONSE  8. (A) Give an example of why knowing the forecast of wind is important? [  (B) Why does wind make the actual temperature feel colder? [		(B)	Blows towards the north						
6. Which of the following is the method used by weather forecasters to tell us how mucolder the wind makes unprotected skin feel?  (A) Heat index (B) Minimum temperature (C) Wind chill temperature (D) Wet-bulb temperature 7. What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr?  (A) -10°c (B) -2°C (C) 2 °C (D) 10°C  PART B: WRITTEN RESPONSE  8. (A) Give an example of why knowing the forecast of wind is important? [  (B) Why does wind make the actual temperature feel colder? [		(C)	Comes from the north						
colder the wind makes unprotected skin feel?  (A) Heat index (B) Minimum temperature (C) Wind chill temperature (D) Wet-bulb temperature  7. What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr?  (A) -10°c (B) -2°C (C) 2 °C (D) 10°C  PART B: WRITTEN RESPONSE  8. (A) Give an example of why knowing the forecast of wind is important? [  (B) Why does wind make the actual temperature feel colder? [		(D)	Heads towards the north						
(B) Minimum temperature (C) Wind chill temperature (D) Wet-bulb temperature  7. What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr?  (A) -10°c (B) -2°C (C) 2 °C (D) 10°C  PART B: WRITTEN RESPONSE  8. (A) Give an example of why knowing the forecast of wind is important? [  (B) Why does wind make the actual temperature feel colder? [	6.		Which of the following is the method used by weather forecasters to tell us how much colder the wind makes unprotected skin feel?						
(B) Minimum temperature (C) Wind chill temperature (D) Wet-bulb temperature  7. What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr?  (A) -10°c (B) -2°C (C) 2 °C (D) 10°C  PART B: WRITTEN RESPONSE  8. (A) Give an example of why knowing the forecast of wind is important? [  (B) Why does wind make the actual temperature feel colder? [		(A)	Heat index						
(C) Wind chill temperature (D) Wet-bulb temperature  7. What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr?  (A) -10°c (B) -2°C (C) 2 °C (D) 10°C  PART B: WRITTEN RESPONSE  8. (A) Give an example of why knowing the forecast of wind is important? [  (B) Why does wind make the actual temperature feel colder? [			Minimum temperature						
(D) Wet-bulb temperature  7. What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr?  (A) -10°c (B) -2°C (C) 2 °C (D) 10°C  PART B: WRITTEN RESPONSE  8. (A) Give an example of why knowing the forecast of wind is important? [  (B) Why does wind make the actual temperature feel colder? [									
(A) -10°C (B) -2°C (C) 2 °C (D) 10°C  PART B: WRITTEN RESPONSE  8. (A) Give an example of why knowing the forecast of wind is important? [  (B) Why does wind make the actual temperature feel colder? [									
(B) -2°C (C) 2 °C (D) 10°C  PART B: WRITTEN RESPONSE  8. (A) Give an example of why knowing the forecast of wind is important? [  (B) Why does wind make the actual temperature feel colder? [	7.	What	What is the wind chill temperature on a -2 °C day if the wind speed is 40 km/hr?						
(B) -2°C (C) 2 °C (D) 10°C  PART B: WRITTEN RESPONSE  8. (A) Give an example of why knowing the forecast of wind is important? [  (B) Why does wind make the actual temperature feel colder? [		(A)	-10°c						
(C) 2 °C (D) 10°C  PART B: WRITTEN RESPONSE  8. (A) Give an example of why knowing the forecast of wind is important? [  (B) Why does wind make the actual temperature feel colder? [			-2°C						
(D) 10°C  PART B: WRITTEN RESPONSE  8. (A) Give an example of why knowing the forecast of wind is important? [  (B) Why does wind make the actual temperature feel colder? [		` /							
8. (A) Give an example of why knowing the forecast of wind is important? [  (B) Why does wind make the actual temperature feel colder? [		` /							
(B) Why does wind make the actual temperature feel colder? [	PAR	T B: W	RITTEN RESPONSE						
	8.	(A)	Give an example of why knowing the forecast of wind is important?	[					
(C) What can you do to reduce the effect of wind chill?		(B)	Why does wind make the actual temperature feel colder?	]					
(C) What can you do to reduce the effect of wind chill? [									
		(C)	What can you do to reduce the effect of wind chill?	[					