

These questions refer to page 17, Wind Rose Diagrams and Figures 20-26 on pages 52-58 of Qatar's Climatological Map, Civil Aviation Authority.

1. What is a wind rose diagram and what information does it provide?
2. Why do you think it is called a 'wind rose' diagram?
3. What are the 16 cardinal directions?
4. What do the color-coded bands on the wind rose diagrams represent?
5. How many stations are there across Qatar and what are they?
6. What are the four main seasons indicated on the wind rose diagram?
7. How many different speed ranges for the annual and four seasons are represented on the map?
8. What is wind speed measured in?
9. Which direction is the wind speed the strongest? Compare the data across all seven stations
10. Which direction is the wind speed calmer? Compare the data across all seven stations.
11. What observations do you notice between the Summer and Winter seasons on Figure 20 (Doha International Airport).
12. What observations do you notice between the Autumn and Spring seasons on Figure 20 (Doha International Airport)?
13. In which season is wind speed most likely observed in Qatar? Explain your answer referring to any of the annual wind rose diagrams.
14. In which season is rainfall least likely observed in Qatar? Explain your answer referring to the same annual wind rose diagram chosen in question 13.

15. What challenges can wind speed have in a country, and during traveling to different locations?
16. Based on the data and your observations, do you think Qatar receives high or low levels of wind speed? Explain using the data.
17. How does Qatar provide the safety of its citizens, residents and visitors during high wind speeds? Provide positive examples.