

Vector and Scalar Questions for GCSE Physics

1. What is the difference between a scalar quantity and a vector quantity?

2. Why is mass considered a scalar quantity?

3. Why do we use the term **magnitude** when describing scalars and vectors?

4. Give two examples of scalar quantities and two examples of vector quantities.

5. What is the key difference between **speed** and **velocity**?

6. Why is **displacement** a vector while **distance** is a scalar?

7. Which of these quantities are vectors? (a) Force, (b) Energy, (c) Time, (d) Acceleration?

8. If an object is moving at a constant speed but changing direction, is its velocity also constant? Explain your answer.

9. Why is **temperature** NOT considered a vector quantity, even though it can be negative?

10. A student argues that "time is a vector because we can go back in time in movies." Explain why this is incorrect.

