

**SMART EXAM RESOURCES**  
**SUBJECT: PHYSICS**  
**TOPIC: SCALARS AND VECTORS**  
**SET-1-QP-MS**

- 1** Speed is a scalar quantity and velocity is a vector quantity.

State the names of **one** other scalar quantity and **one** other vector quantity.

scalar quantity .....

vector quantity .....

[2]

## MARK SCHEME:

a scalar quantity distance, time, mass, energy, temperature	<b>B1</b>
a vector quantity force, weight, acceleration, momentum, electric field strength, gravitational field strength	<b>B1</b>

2 Some physical quantities are scalars and other physical quantities are vectors.

(a) State how a vector quantity differs from a scalar quantity.

.....  
..... [1]

## MARK SCHEME:

(a)	it / a vector has a direction	<b>B1</b>
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- 3 Some physical quantities are scalars and other physical quantities are vectors.

Circle the vector quantities in the list.

**acceleration   energy   mass   momentum   temperature   time   speed   velocity**

[2]

## MARK SCHEME:

two / three vectors <b>and</b> no more than one other quantity underlined	<b>C1</b>
acceleration <b>and</b> momentum <b>and</b> velocity underlined <b>and</b> no others	<b>A1</b>

- 4 A force is a vector quantity.

State the names of **two** other quantities that are vectors.

1. ....

2. ....

[2]

## MARK SCHEME:

	<b>B2</b>
any <b>two</b> from: acceleration / deceleration, gravitational field strength, impulse, momentum, velocity, weight	B2



5 A force is a vector quantity.

(a) (i) State **two** features of a vector quantity.

1. ....

2. ....

[2]

## MARK SCHEME:

(a)(i)		<b>B2</b>
	magnitude <b>or</b> size	B1
	direction	B1