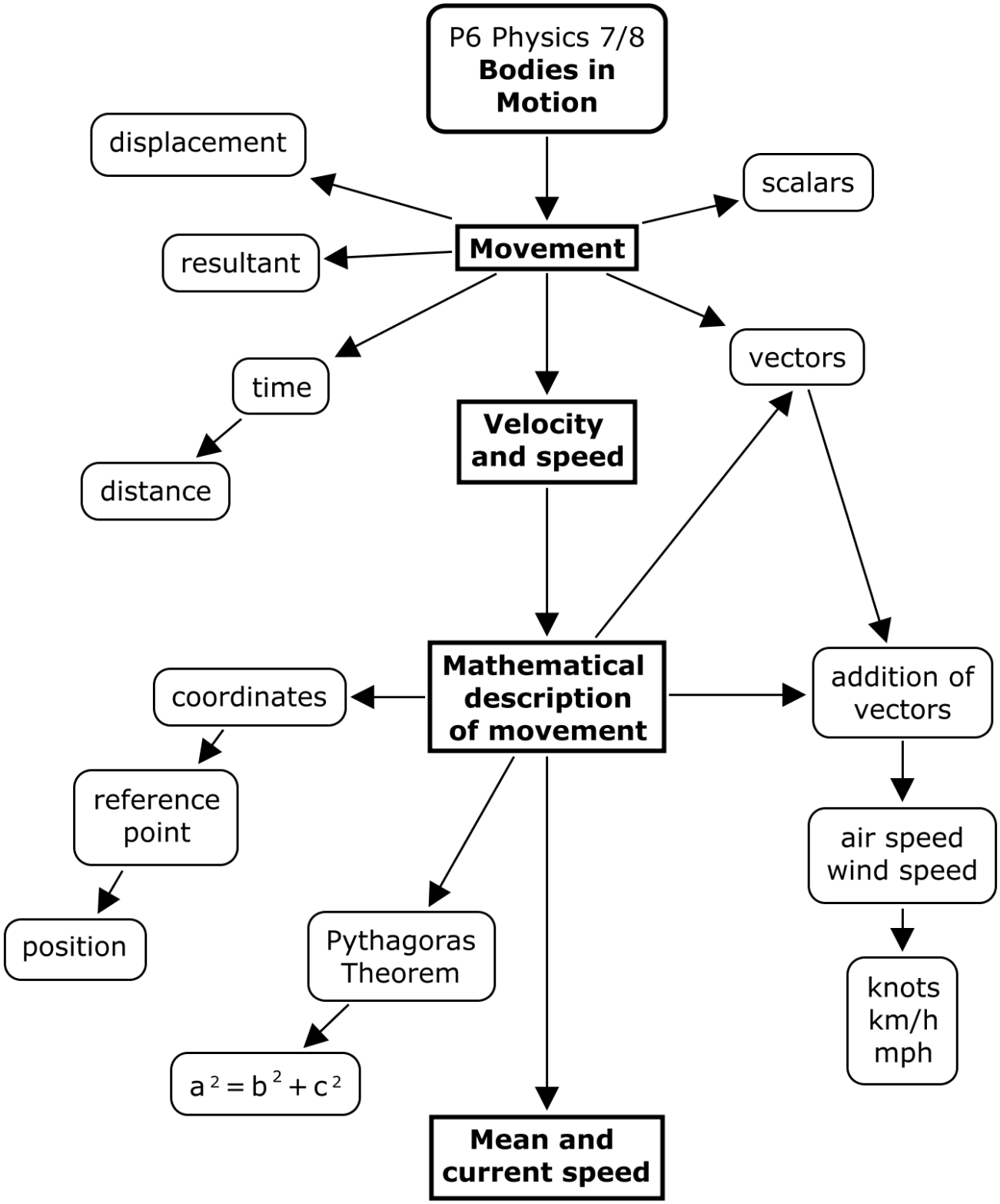
P6 Physics 7/8
Bodies in Motion
displacement
scalars
Movement
resultant
time
vectors
Velocity and speed
distance
Mathematical description of movement
coordinates
addition of vectors
reference point
air speed
wind speed
position
Pythagoras Theorem
knots
km/h
mph
$a^2 = b^2 + c^2$
Mean and current speed

addition of vectors	Two or more vectors can be added together to determine the result (or resultant). More details here: http://www.physicsclassroom.com/class/vectors/u3l1b.cfm	Vektoraddition
air speed	the speed of an aircraft relative to the air (kn)	Luftgeschwindigkeit
altitude	flying height of a plane above sea level	Höhe
coordinates	a set of numbers that defines the location of a point in space	Koordinaten
current speed	speed at the moment of observation	aktuelle Geschwindigkeit
distance	the separation between two points, a scalar quantity (m)	Entfernung
displacement	the shortest distance from the initial to the final position of something (m)	Verschiebung
force	agent that results in accelerating or deforming an object (N)	Kraft
frame of reference	coordinate system used to define motion	Bezugsrahmen
ground speed	the resultant vector speed combining air speed and wind speed	Grundgeschwindigkeit
knots	(pronounced not) is a unit of speed equal to one nautical mile (1.852 km) per hour, approximately 1.151 mph. (kn)	Knoten
mean (or average) speed	The average of two speed. final speed + initial speed divided by 2. $v = Vf + Vi/2$	Durchschnittsgeschwindigkeit
position	separation between an object and its reference point	Position
Pythagoras' Theorem	It states that the square of the hypotenuse (the side opposite the right angle) is equal to the sum of the squares of the other two sides. $a^2=b^2+c^2$	Satz des Pythagoras
reference point	zero location in a coordinate system	Aufpunkt
resultant	a vector representing the sum of two or more vectors	Resultante
scalar	quantity, like distance that has only magnitude	skalar
speed	ratio of distance travelled to time interval. $v=\Delta d/\Delta t$ (=change in distance divided by change in time)	Geschwindigkeit
vector	quantity having both magnitude and direction	vektor
velocity	ratio of change of position to time interval over which change takes place	Geschwindigkeit
wind barbs	graphical representations of both the direction and speed of wind	wind barbs