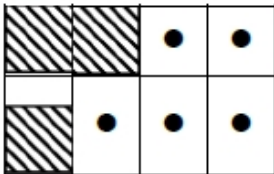


Choropleth Maps Mark Scheme

Q1.

Question number	Answer	Additional guidance	Mark
(a)	<p>B2</p> 	<p>B2 for all 8 correct. (B1 for 6 or 7 correct)</p>	(2)
(b)	<p>B1 Grace's comment is valid because the darker areas/more children are in the top left (and children tend to congregate around play equipment). Or Grace's comment may not be valid because we only know that there are more children in that region (and not where the play equipment is).</p>	<p>B1 for correct assessment of the validity of the conclusion and a correct supporting reason We must see</p> <ul style="list-style-type: none"> a decision given – e.g. valid or invalid, correct or incorrect reference to more children/higher concentration of children in the top left hand corner/that region (of the map) 	(1)

Q2.

Question	Answer	Additional guidance	Mark
(a)	<p>B2 for reference to (most) areas with high numbers of bees corresponding to areas with high concentrations of wild flowers AND reference to the area at the bottom right (A4-A6, B4-B6) having a high concentration of bees, but a low concentration of wild flowers OR if B2 not earned... B1 for reference to (most) areas with high numbers of bees corresponding to areas with high concentrations of wild flowers OR reference to the area at the bottom left (A4-A6, B4-B6) having a high concentration of bees, but a low concentration of wild flowers</p>	<p>B2 for a complete answer assessing the conclusion based on the diagram OR if B2 not earned... B1 for an incomplete answer assessing the conclusion based on the diagram</p>	(2)

Q3.

Question number	Answer	Additional guidance	Mark
	<p>B1 Top right of grid B1 Squares are shaded darkest in this region.</p>	<p>B1 for a correctly identifying the region (e.g. NE corner) B1 for a statistical reason relating to use of the key.</p>	(2)

Q4.

Question number	Answer	Additional guidance	Mark
(a)	B1 4.1(%) to 9.3(%) (decrease)		(1)
(b)	B1 13		(1)
(c)	B1 e.g. (Although more areas had a decrease) we do not know the numbers (of officers), only percentages. OR e.g. The fewer areas with a percentage increase might have more officers than those with a percentage decrease.	B1 Allow equivalent answers showing an understanding that we have percentages not numbers. Do not accept reference to total population (of officers) of England and Wales.	(1)
(d)	B1 Choropleth (map)	B1 Condone misspelling if intention is clear. (eg chloropeth)	(1)

Q5.

Question number	Answer	Additional guidance	Mark
(a)	B1 Suitable as does not require specialist knowledge to understand/easy to understand. e.g. suitable because you don't have to be a statistics lecturer to understand the diagram. OR B1 Not suitable as it is difficult to distinguish between the colours.	B1 for assessment of the appropriateness of using a choropleth map	(1)
(b)	B3 for yes/partially AND two correct statements, e.g. <ul style="list-style-type: none"> as shows countries in the south have higher literacy rates (above 60%) as they have more darker areas. whereas countries in the centre/north have lower literacy rates (below 60%) as they have more lighter areas. However, a small number of countries in the very north have higher literacy rates (above 60%) too. OR if B3 not earned... B2 for yes/partially AND one correct statement making reference to percentages or colours OR for two correct statements with no conclusion OR if B2 not earned... B1 for yes/partially with an attempt at a reason and not making reference to percentages or colours OR for a correct statement without a conclusion	B3 for a complete answer assessing the appropriateness of the conclusion OR if B3 not earned... B2 for an incomplete answer assessing the appropriateness of the conclusion. OR if B2 not earned... B1 for an attempt at assessing the appropriateness of the conclusion	(3)

