

Assessment Schedule – 2018**Geography: Apply geography concepts and skills to demonstrate understanding of a given environment (91243)****Assessment Criteria**

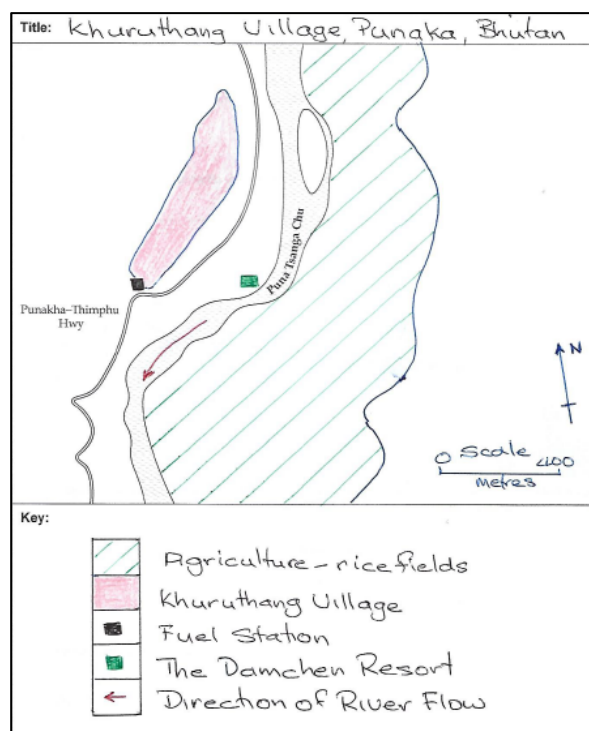
Achievement	Achievement with Merit	Achievement with Excellence
<p><i>Applying geography concepts and skills to demonstrate understanding of a given environment involves:</i></p> <ul style="list-style-type: none"> • using skills and geographic conventions in the presentation and / or interpretation of information • showing understanding of geography concepts. 	<p><i>Applying geography concepts and skills with precision to demonstrate in-depth understanding of a given environment involves:</i></p> <ul style="list-style-type: none"> • using skills and geographic conventions to a high level of accuracy in the presentation and / or interpretation of information • showing detailed understanding of geography concepts. 	<p><i>Applying geography concepts and skills with precision to demonstrate comprehensive understanding of a given environment involves:</i></p> <ul style="list-style-type: none"> • showing a thorough understanding of geography concepts, using geographic terminology and showing insight.

Cut Scores

Not Achieved	Achievement	Achievement with Merit	Achievement with Excellence
0 – 2	3 – 4	5 – 6	7 – 8

Evidence

Task	Achievement	Achievement with Merit	Achievement with Excellence
(a)	Skill: Photo interpretation and précis mapping		
	<p>Completes the précis map using conventions to show most features, enabling the map to be readily interpreted.</p> <p><i>The features need to be in the approximate position but not necessarily within the accuracy limits shown below.</i></p> <p><i>Allow omission of some conventions.</i></p>	<p>Completes the précis map using conventions to show most features to a high level of accuracy.</p> <p><i>The features must be within the accuracy limits shown below.</i></p> <p><i>Allow some minor inaccuracy, error, or omission.</i></p>	
<p><i>Possible evidence for part (a):</i></p> <p>Features of the map include:</p> <ul style="list-style-type: none"> • the area of agriculture • the built-up village area • the fuel station • the resort • the direction of the river. <p>Conventions include:</p> <ul style="list-style-type: none"> • title • key • indication of north direction • indication of scale • features (fuel station, resort) shown as locations • spatial features (agriculture, village) shown as areas with clear boundaries and distinct colours / shading. <p>Accuracy includes:</p> <ul style="list-style-type: none"> • area of agriculture: approx. 30–50% of the space to the east of the river • village: all or mostly to north of the road • fuel station: located on (the north side of the) bend in the road • resort: on the broad bend of the river • river flow: from north to south • scale of 400m: consistent with distance between fuel station and resort (1cm = 80–100m) • north direction: offset to LHS of vertical • title: appropriate. 			



Question	Achievement	Achievement with Merit	Achievement with Excellence
(b) (i)	Skill: Diagram construction		
	<p>Completes the diagram using conventions to show key features of the dry winter wind process, enabling the diagram to be readily interpreted.</p> <p><i>Allow omission of some of the conventions shown in Figure 6.</i></p>	<p>Completes the diagram using conventions with a high level of accuracy to explain the sequence of actions in the dry winter wind process.</p> <p><i>Allow some minor inaccuracy, error, or omission.</i></p>	
<p>Possible evidence for part (b) (i):</p> <p>Features of the process include:</p> <ul style="list-style-type: none"> • the rising of warm air located over Bay of Bengal creating a low-pressure zone • cooler winds from the Tibet Desert being drawn toward the low-pressure zone • cold or dry wind / no rainfall over Bhutan. <p>Conventions include:</p> <ul style="list-style-type: none"> • the use of a key or annotated notes to show steps • a distinction between warm and cooler winds by colour and / or style • the use of key to show symbols. <div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">Dry winter winds – October to April</p> <p>Key:</p> <p>The sun Warm Air Cold Dry Wind</p> <ol style="list-style-type: none"> 1. in winter, the sun is over the Bay of Bengal 2. The sun heats the ocean, causing air above it to be heated and rise creating a low-pressure zone. 3. The cold and heavy air over the Tibet Desert blows towards the low-pressure zone. 4. As the wind passes over Bhutan, it is cold and dry </div>			

Question	Achievement	Achievement with Merit	Achievement with Excellence
(b) (ii)	Understanding of a geographic concept: Processes		
	<p>Shows an understanding of the concept of <u>processes</u> (either as a sequence of actions or as temporal variation), with regard to the monsoon wind process in either summer OR winter by:</p> <ul style="list-style-type: none"> • describing the sequence of actions or the seasonal temporal variation • identifying the effect of the process on Bhutan's climate • making some general references to the environment (e.g. seasons; months of the year; north / south; places – the Bay of Bengal, Tibet, Bhutan, the Himalaya Mountains). <p><i>Note: Evidence of understanding can come from part (i) as well as part (ii).</i></p>	<p>Shows a detailed understanding of the concept of <u>processes</u> (either as a sequence of actions or as temporal variation), with regard to the monsoon wind process in either summer AND winter by:</p> <ul style="list-style-type: none"> • explaining in detail EITHER the sequence of actions (i.e. the links between steps) OR the reason for the seasonal temporal variation • identifying the effect of the process on Bhutan's climate • making specific references to the environment. 	<p>Shows a thorough understanding of the concept of <u>processes</u> (either as a sequence of actions or as temporal variation), with regard to the monsoon wind process in both summer AND winter by:</p> <ul style="list-style-type: none"> • explaining comprehensively BOTH the sequence of actions (i.e. clear links between steps) AND the reason for the seasonal temporal variation (wet and dry seasons) • identifying the effect of the process on Bhutan's climate • making specific references to the environment throughout • using geographic terminology, e.g.: <ul style="list-style-type: none"> - low pressure zone - moist wind / cold dry wind • showing insight, e.g: <ul style="list-style-type: none"> - clearly linking seasonal climate to position / movement of the sun.

Question	Achievement	Achievement with Merit	Achievement with Excellence
(c)	Skill: Graph interpretation		
	<p>Uses skills and conventions in the interpretation of information by identifying a relationship between climate and hydroelectricity production OR tourist arrivals, providing mostly general supporting evidence, e.g. ONE of:</p> <ul style="list-style-type: none"> • in periods of the highest rainfall during both July and September, electricity production is at its highest • during the dry periods of November to March, production is at its lowest • during May to August, arrivals are low due to the heavy rainfall • tourist arrivals are high in the months of March and April, and September and November, when temperatures and rainfall are mild. <p><i>Allow some inaccuracies, errors, or omissions.</i></p>	<p>Uses skills and conventions in the interpretation of information by identifying a relationship between climate and hydroelectricity production AND tourist arrivals, providing a high level of accuracy with specific supporting evidence, e.g.:</p> <ul style="list-style-type: none"> • in periods of the highest rainfall during both July and September, electricity production is at its highest, at 18% of annual production • during the dry periods of November to March, production is at its lowest, at only 3% of annual production • during May to August, arrivals are low due to the heavy monthly rainfall of over 300 mm due to the summer monsoon • tourist arrivals are high (8,000 –12,000) in the months of March and April, and September and November, when temperatures are mild (10–16°C) and rainfall is not heavy (10–50 mm). <p><i>Allow for some inaccuracy, error, or omission.</i></p>	

Question	Achievement	Achievement with Merit	Achievement with Excellence
(d)	Bhutan and sustainability (relevant geographic concepts are Environments, Interaction, and Sustainability)		
	<p>Shows an understanding of the specified concepts as they relate to Bhutan’s sustainability, by:</p> <ul style="list-style-type: none"> • making reference to at least ONE concept (e.g. by describing features of the natural and cultural <u>environments</u>, with specific reference to “environment”) • discussion that is mainly descriptive • general references to the environment (e.g. “high rainfall”) <p><i>Note: References to concept(s) is general (i.e. refers to “environment” / “sustainability”), some explanation, but generally descriptive, with some general supporting information.</i></p>	<p>Shows a detailed understanding of the specified concepts as they relate to Bhutan’s sustainability, by:</p> <ul style="list-style-type: none"> • making explicit reference to TWO concepts (e.g. by establishing an <u>interaction</u> between the natural and cultural <u>environments</u>) • discussion with explanation • specific references to the environment (e.g. “high summer rainfall”) <p><i>Note: References to concepts are explicit and discusses with reference to at least two concepts with some explanation, and a range of specific reference(s).</i></p>	<p>Shows a thorough understanding of the specified concepts as they relate to Bhutan’s sustainability, by:</p> <ul style="list-style-type: none"> • explicitly explaining the interrelationship between all THREE concepts, clearly establishing <u>sustainability</u> with specific detail to unpack the concept(s), (e.g. “Sustainability involves adopting ways of thinking and behaving ...”) • discussion that includes explanation throughout • specific reference to the environment throughout • using geographic terminology, e.g. “monsoon”, “hydro-electricity”, “greenhouse gases” • showing insight, e.g.: <ul style="list-style-type: none"> - draws a conclusion, such as “the future is sustainable because power generation can be increased to meet a future increase in car numbers” - explains why Bhutan has an advantage over other countries because of its small population or abundant natural resources <p><i>Note: References to concepts are explicit and unpacked with reference to the detail of the concept (e.g. “Sustainability involves adopting ways of thinking and behaving ...”), full or detailed explanation, and a wide range of specific reference(s) throughout, with terminology and insight.</i></p>
<p>See overleaf for examples of possible evidence for part (d).</p>			

(d)
cont'd

Interactions between the natural and cultural environments (i.e. the effects of the former environment on the latter):

- Mountains
 - caused Bhutan to be isolated and therefore delayed development, allowing for better planning
 - limit agriculture to the river valleys
 - affect the settlements and road pattern (map evidence)
 - provide a tourist attraction
- Climate
 - affects seasonal patterns of hydroelectricity production and tourist arrivals
 - provides abundant water for hydroelectricity production (including revenue from power exports, domestic lighting) and irrigation
- Forests
 - absorb greenhouse gases
 - native forests and wildlife influences tourism as a tourist attraction.

Interactions between the cultural and natural environments (i.e. the effects of the former environment on the latter):

- Bhutan's Constitution (Buddhist philosophy) limits economic growth and so protects the natural environment (e.g. happiness is prioritised over GNP and development of resources)
- forests protected by constitution with min 60%; 50% currently in national parks. This protects wildlife
- use of electric cars to reduce harmful emissions in order to protect air quality and reduce greenhouse gases
- rivers dammed to provide hydroelectric production, affecting river flows.

How interactions between the cultural / natural environments are sustainable:

- Forests are protected by the Constitution to ensure that they are harvested sustainably.
- Hydroelectricity is a dependable renewable resource, so its use is sustainable. As an energy source for cars it additionally avoids them producing harmful emissions; it also provides a sustainable source of energy for homes, and by its export to neighbouring countries generates national income.
- Not all hydroelectricity potential is currently used, so future increases in demand can be met sustainably.
- Limiting tourist arrivals ("high value, low impact") protects the natural and cultural environment.

N1	N2	A3	A4	M5	M6	E7	E8
<p>Includes sufficient information to show some skill in presentation or interpretation, but lacks key geographic conventions and accuracy, in ONE of:</p> <ul style="list-style-type: none"> • the précis map • the diagram • graph interpretation <p><i>OR</i></p> <p>Attempts to apply a geographic concept.</p>	<p>Includes sufficient information to show some skill in presentation or interpretation, but lacks key geographic conventions and accuracy, in ONE of:</p> <ul style="list-style-type: none"> • the précis map • the diagram • graph interpretation <p><i>AND</i></p> <p>Attempts to apply a geographic concept.</p>	<p>Shows skill in presentation or interpretation, and uses some key geographic conventions, but lacks accuracy, in TWO of:</p> <ul style="list-style-type: none"> • the précis map • the diagram • graph interpretation <p><i>AND</i></p> <p>Shows some understanding, with some supporting information, of ONE of the concepts of:</p> <ul style="list-style-type: none"> • Processes • Environments • Interaction • Sustainability. 	<p>Shows skill in presentation or interpretation, and use most key geographic conventions, but lacks accuracy, in TWO of:</p> <ul style="list-style-type: none"> • the précis map • the diagram • graph interpretation <p><i>AND</i></p> <p>Shows understanding, with some supporting information, of ONE of the concepts of:</p> <ul style="list-style-type: none"> • Processes • Environments • Interaction • Sustainability. 	<p>Shows skills with accuracy in presentation or interpretation, but may lack use of a key geographic convention, in TWO of:</p> <ul style="list-style-type: none"> • the précis map • the diagram • graph interpretation <p><i>AND</i></p> <p>Explains, in some detail, using a range of specific supporting evidence, TWO of the concepts of:</p> <ul style="list-style-type: none"> • Processes • Environments • Interaction • Sustainability. 	<p>Shows skills with a high level of accuracy in presentation or interpretation, and use of all key geographic conventions, in TWO of:</p> <ul style="list-style-type: none"> • the précis map • the diagram • graph interpretation <p><i>AND</i></p> <p>Explains, in detail, using a wide range of specific supporting evidence, TWO of the concepts of:</p> <ul style="list-style-type: none"> • Processes • Environments • Interaction • Sustainability. 	<p>Shows skills with a high level of accuracy in presentation or interpretation, and use of all key geographic conventions, in TWO of:</p> <ul style="list-style-type: none"> • the précis map • the diagram • graph interpretation <p><i>AND</i></p> <p>Fully explains, showing some insight, and integrating a range of specific supporting evidence and geographic terminology, the concepts of Sustainability and TWO others of:</p> <ul style="list-style-type: none"> • Processes • Environments • Interaction. 	<p>Shows skills with a high level of accuracy in presentation or interpretation, and use of all key geographic conventions, in TWO of:</p> <ul style="list-style-type: none"> • the précis map • the diagram • graph interpretation <p><i>AND</i></p> <p>Fully explains, showing insight, and integrating a wide range of specific supporting evidence and geographic terminology consistently throughout, the concepts of Sustainability and TWO others of:</p> <ul style="list-style-type: none"> • Processes • Environments • Interaction.

N0 = No response; no relevant evidence.