| Teacher(s) | MDI - RKG                                | Subject group and discipline | Geography |                     |    |
|------------|--|------------------------------|-----------|---------------------|----|
| Unit title | Antarctica – the last of the wild places | MYP year                     | 2         | Unit duration (hrs) | 18 |

Inquiry: Establishing the purpose of the unit

| Key concept   | Related concept(s) | Global context                |  |  |  |  |  |
|---|--------------------|-------------------------------|--|--|--|--|--|
| Time place and space  | Networks           | Orientation in time and place |  |  |  |  |  |
| Statement of inquiry  |                    |                               |  |  |  |  |  |
| Antarctica's geopolitical role is changing over time may lead to disruption to the ecological networks which define the unique natural processes. |                    |                               |  |  |  |  |  |
| Examples of Inquiry questions   |                    |                               |  |  |  |  |  |
| Factual—  |                    |                               |  |  |  |  |  |
| How do ocean currents disseminate warmth from the equator?<br>What are the networks that create Antarctica's environment?                         |                    |                               |  |  |  |  |  |
| What role does Antarctica play in ecological networks?  |                    |                               |  |  |  |  |  |
|   |                    |                               |  |  |  |  |  |
| Conceptual—   |                    |                               |  |  |  |  |  |
| What role do ocean currents have in keeping Antarctica cold and dry?  |                    |                               |  |  |  |  |  |
| How have food webs adapted to survive such a hostile environment?   |                    |                               |  |  |  |  |  |
| How does urbanisation of land lead to impacts on the natural environment?   |                    |                               |  |  |  |  |  |

What opportunities does Antarctica's space provide a globalised world?

## Debatable—

Should we inhabit Antarctica at the cost of the intrinsic value of wilderness?

Are the opportunities in Antarctica worth the investment of overcoming the challenges?

| Objectives   | Summative assessment  |  |  |
|--|---|--|--|
| A: Knowledge and Understanding   | Outline of summative assessment task(s) including assessment criteria:  | Relationship between summative assessment task(s) and statement of inquiry:  |  |
| i. use terminology in context  |   |  |  |
| ii. demonstrate knowledge and understanding of<br>subject-specific content and concepts through        | Goal: Write a report detailing the difficulties of human<br>habitation of Antarctica that would be genuinely  | Students have to construct an argument which debates for or against the urbanisation of Antarctica   |  |
| descriptions, explanations and examples  | sensitive to the systems and ecology of the area.   | This requires knowledge and understanding of the processes that would be effected as well as the difficulties of surviving the harsh environment |  |
| D: Critical Thinking   | Role: Campaigner for the protection of the Antarctic wilderness   | This will put into context the value that fishing, mining  |  |
| i. discuss concepts, issues, models, visual representation and theories                                |   | and nuclear power has to debate whether it is useful   |  |
| ii. synthesize information to make valid arguments   | Audience: Antarctic Stakeholders including climate<br>refugees  | Students should evaluate the strength of counter   |  |
| iii. analyse and evaluate a range of sources/data in terms of origin and purpose, examining values and |   | arguments to show a balanced understanding and demonstrate their opinion relative to another person's  |  |
| limitations iv. interpret different perspectives and their implications.                               | Situation: Antarctica provides a theoretical refuge for<br>those displaced by climate change with resources to<br>create a new society. This opportunity is weighed |  |  |

| against the destruction it would bring to one of the  |  |
|---|--|
| world's last wildernesses   |  |
|   |  |
| Purpose: get students to reflect on the resources   |  |
| needed for society as well as the difficulties that such  |  |
| an extreme landscape pose to development. Contrast these needs against the ecological structures that |  |
| would be affected by a change in the balance.   |  |
|   |  |
| Objectives:   |  |
|   |  |
| A and D   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |

## Approaches to learning (ATL)

In order for students to produce an academic report summary they will need to develop their Reflective Skills.

Explicitly taught and practised skill strategy: Students are being encouraged to write a holistic report on the challenges of societal development in an extreme environment alongside the impacts that this will have on the environment. Inspired by the EIA's studied by Year 13 ESS students, it will be important for students to have a holistic view from which to summarise. This will be done through explicit moments in lessons where they demonstrate the interconnectivity between human development and the fragile ecosystem in which the theoretical society would reside. These are transferable skills which reflect those needed for effective revision in later years.

## **Reflective Skills:**

- Develop new skills, techniques and strategies for effective learning
- · Identify strengths and weaknesses of personal learning strategies
- Demonstrate flexibility in the selection and use of learning strategies
- Consider content (What did I learn about today? What don't I yet understand? What questions do I have now?)
- · Consider ethical, cultural and environmental implications