



明愛陳震夏郊野學園  
Caritas Chan Chun Ha Field Studies Centre



# Dynamic Earth : From Theory to Practice of Geoconservation

**Student Name:** \_\_\_\_\_

**Group no.:** \_\_\_\_\_

**Course Date:** \_\_\_\_\_

## OBJECTIVES

- Knowledge:
  - To examine the underlying factors and processes in shaping the geology and geomorphology of the study area
  - To investigate the possibility of development of geotourism in the study area
- Skills:
  - To practise skills of geology fieldwork
  - To inspire different perspectives of thinking
- Value:
  - To cherish the invaluable geology resources in Hong Kong



### Fieldwork (Group equipment list)

	Items	Quantity	Check	Return
1	compass	1		
2	Abney level	1		
3	magnifier	1		
4	mineral hardness testing tools	1 Set		
5	clipboard	1		
6	digital camera (provide for oneself)	1		



## Relevance to the DSE geography curriculum

Dynamic Earth : The Building of Hong Kong

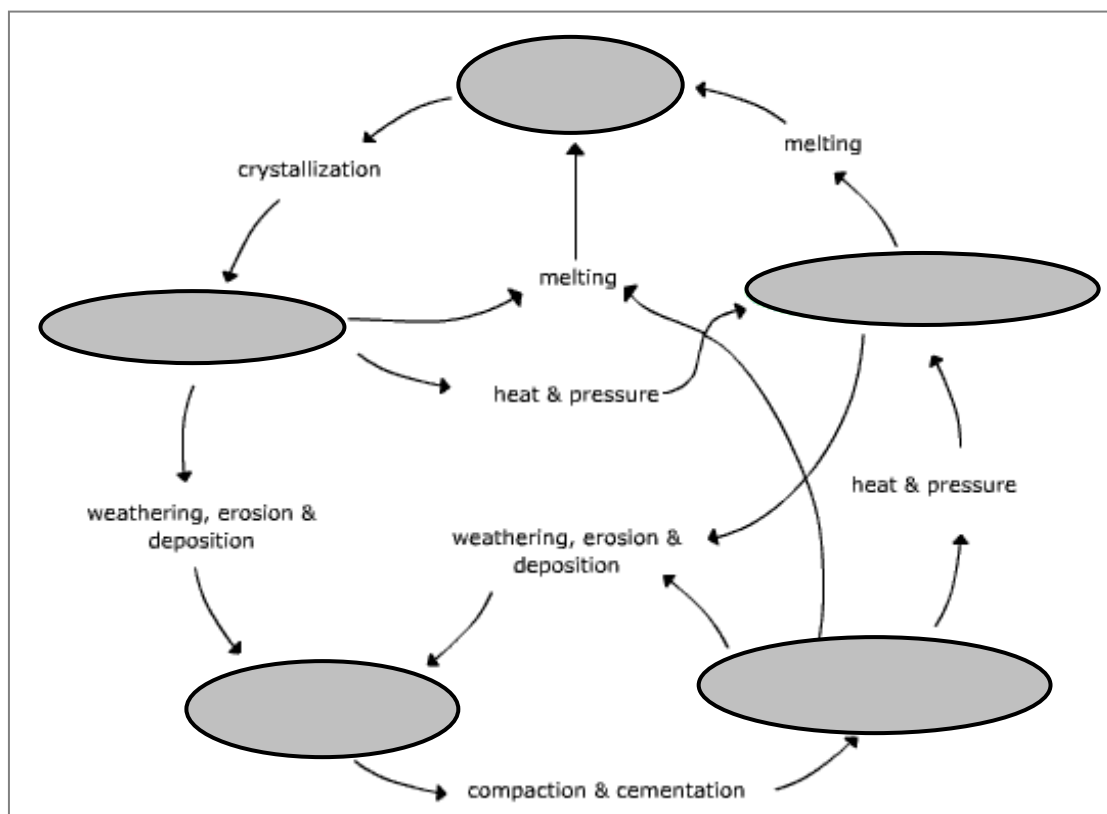
### ----- PLANNING & PREPARATION -----

#### ➤ Prior knowledge

#### Rock Cycle

Fill the following rock cycle with the terms given.

Igneous Rock	Sedimentary Rock	Metamorphic Rock	Sediment	Magma
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#### Rock Classification

Pick up the rock samples and try to classify them in the following table.

Type of rocks	Properties of rocks	Name of rocks [Sample no.]
Igneous rocks		
Sedimentary rocks		
Metamorphic rocks		



## Issue : Does Hong Kong have sufficient conditions to develop geotourism?

### Background Information

Government has chosen eight locations in Hong Kong to develop into National Geopark in 2009. Furthermore, they have been upgraded to Global Geopark in 2011. Lai Chi Chong is located at the northeastern part of the New Territories. It has become the “Site of Special Scientific Interest” since 1985 due to its special geological environment. It is one of the locations of Global Geopark nowadays.

### Role Play Session

It has been a controversial issue of the establishment of Geopark in Hong Kong several years ago. Different parties have different views about the development of geotourism in Hong Kong. A forum will be held by RTHK to encourage the open discussion. A role will be assigned to your group in the forum. The forum will be proceeded according to the following schedule.

Schedule	Content	Time limit
Start of forum	Introducing background and representatives of groups (by Chairman)	1 minute
Speaker of groups' representatives	Presenting standpoint, opinions and recommendations: <ul style="list-style-type: none"> <li>Government (5 minutes)</li> <li>Association for Geoconservation (5 minutes)</li> <li>Property developers (5 minutes)</li> <li>Travel agents (5 minutes)</li> <li>Tourists (5 minutes)</li> <li>Local villagers (5 minutes)</li> </ul>	30 minutes
Open discussion	Open Q & A session	20 minutes
End of forum	Conclusion (by Chairman)	2 minutes



## ----- DATA COLLECTION -----

### Fieldwork

1. Your group is going to present your opinions and suggestions about the issue “Does Hong Kong have sufficient conditions to develop geotourism?” You need to collect data and information in the study area so as to support the standpoint and opinions of your assigned role in the forum.
2. Your group will be assigned to one of the study points. You are going to examine the underlying factors and processes of the geology and geomorphology of the study point according to the handout. You need to explain the phenomenon to other groups.

### Fieldwork (1) : Use the following framework to record your relevant information

Assigned role :
Required information (including first-hand & second-hand data) and methods of collection :
Record of data collection :
Data processing and analysis :
Standpoint and Conclusion (please provide evidence) :
Other suggestions :



## Extended Activities

### Mineral Identification

Pick up and test the following mineral samples in the box of specimen set. Try to match the name of minerals with their relevant properties.

#### Name of minerals

#### Properties

Calcite	◆	◆ Colour of brass and cubic in shape
Graphite	◆	◆ Feel greasy and can be scratched by fingernail
Fluorite	◆	◆ Give black streak on paper
Magnetite	◆	◆ Harder than copper coin but softer than Quartz
Pyrite	◆	◆ Transparent and laminated structure
Muscovite	◆	◆ Can be scratched by copper coin and give gas bubbles with acid
Quartz	◆	◆ Attracted by magnet
Talc	◆	◆ Too hard to be scratched with everyday materials



