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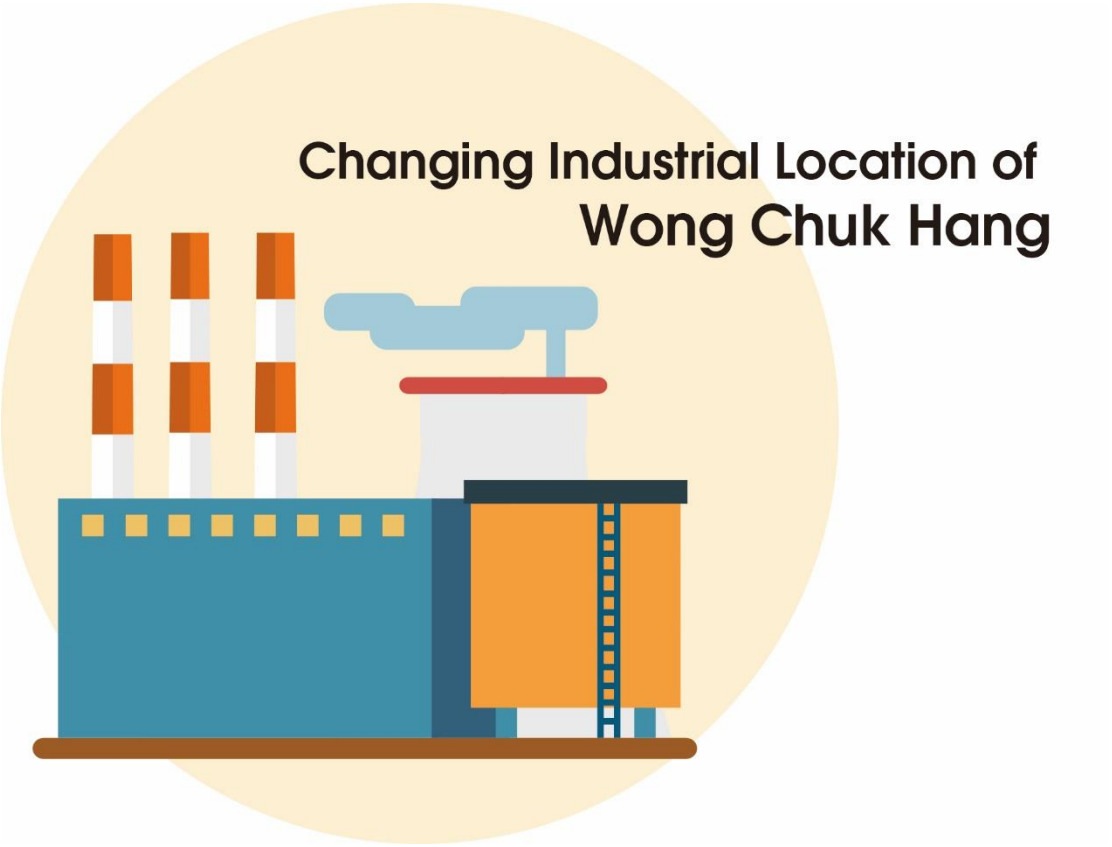
Caritas Chan Chun Ha Field Studies Centre



Name: _____ **Group:** _____

Date: _____

Objectives:

Knowledge: (1) To understand the present situation of manufacturing and non-manufacturing industries in the study area

(2) To analyze the change of manufacturing industry and the factors affecting industrial location of Wong Chuk Hang

Skills: (1) To use appropriate sampling methods to improve the validity and reliability of data collected

(2) To use various fieldwork strategies to collect first-hand data e.g. land use mapping, categorizing and counting, observation and recording

(3) To use appropriate statistical graphs to process quantitative data

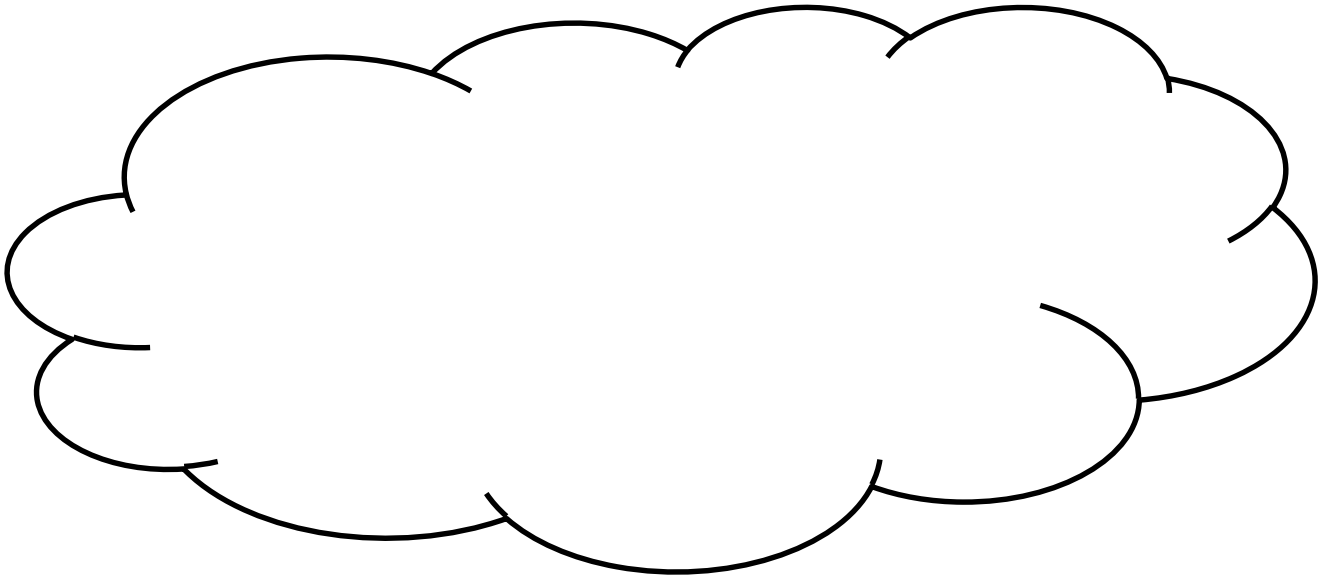
Value: (1) To cherish the advantage of industrial development between China and Hong Kong

Relevance to the DSE Geography Curriculum

✓ Changing Industrial Location – How and why does it change over space and time?

Basic concepts:

- List TEN examples of manufacturing industries.



- How do you classify the above manufacturing industries?
- What kinds of manufacturing industries are difficult to find in Hong Kong today? Why?

STAGE 1: PLANNING AND PREPARATION

➢ Key point of fieldwork: Changing Industrial Location

To study the locational factors of manufacturing industry in Hong Kong, you should think about the questions below:

1. Where to conduct the fieldwork?

- Name THREE industrial areas in Hong Kong. 1._____
  2._____
  3._____
- What are the characteristics of Wong Chuk Hang industrial area?

  What are the advantages of conducting industrial fieldwork in Wong Chuk Hang?

2. When is the ideal to conduct industrial fieldwork in Wong Chuk Hang? Why?

➢ Hypothesis setting / Enquiry Question

1. There is more _____ land use can be found in study area of Wong Chuk Hang.

2. There is more _____ land use proximity to the Wong Chuk Hang MTR station.

3. How to collect the data below?

Method for primary data collection

A) Observation	B) Measurement	C) Counting	D) Category
E) Distribution (mapping)	F) Scoring	G) Field sketching	H) Questionnaire
I) In-depth Interview			

Research Items	Method(s) [Please fill the letter above]
How many industrial buildings here?	
How many manufacturing activities remain in the industrial buildings?	
Other relevant field evidences: _____	

Explain how the following information could help you to understand the industrial activities and the locational factors of Wong Chuk Hang industrial district in the early years?
Old Newspaper Old Maps Study Reports from different academic institutions
Other than the information above, what other information could help you understand the industrial activities and the locational factors of Wong Chuk Hang industrial district in the early years?

STAGE 2: DATA COLLECTION

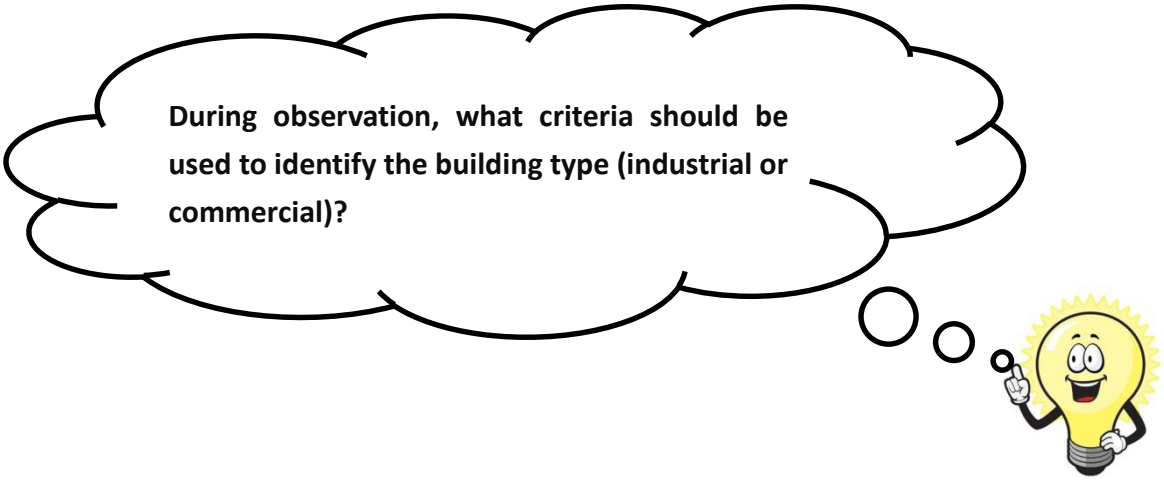
1. Land use distribution

Walk along the transect and classify the land use of all buildings in the study area. Use the colour scheme below to show the land use distribution on the base map (p.16).

Land use*	Code	Colour
Commercial	Com	
Residential	Res	
Industrial	I	
Government/Community/Institution (e.g. hospital, school, library, etc.)	G/C/I	
Recreational	Rec	
Vacant	V	
Work in progress #	WIP	
Transportation	T	

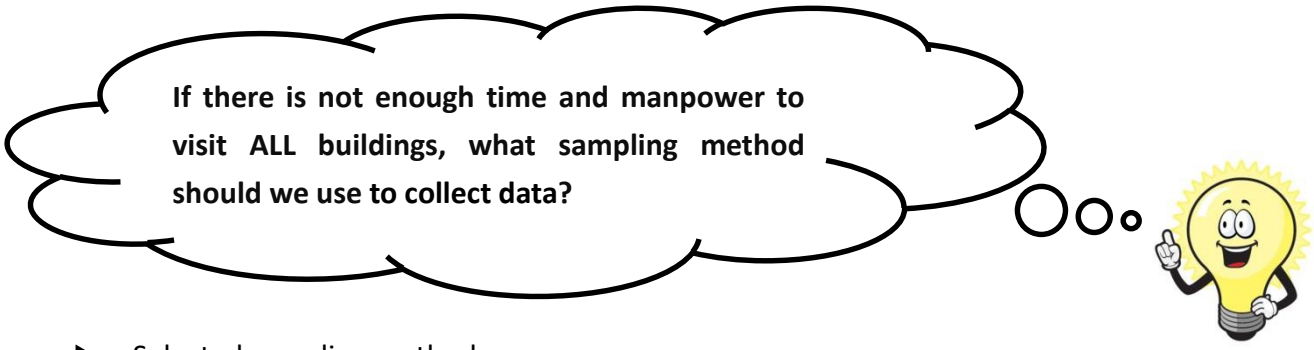
*** Buildings are NOT classified as mixed land use in this study. You should classify the land use by observing the whole building.**

 # I*ndicate the future land use in the blanket representing the future land use, i.e. WIP (Com) or WIP (Res)*



2. Categorizing and counting manufacturing and non-manufacturing industries

Enter the lobby of selected buildings and take photo of the directory. Classify the different types of economic activities shown in the directory on the table listed at the bottom of this page. Calculate the number and percentages of manufacturing and non-manufacturing activities of selected buildings.



▶ Selected sampling method: _____

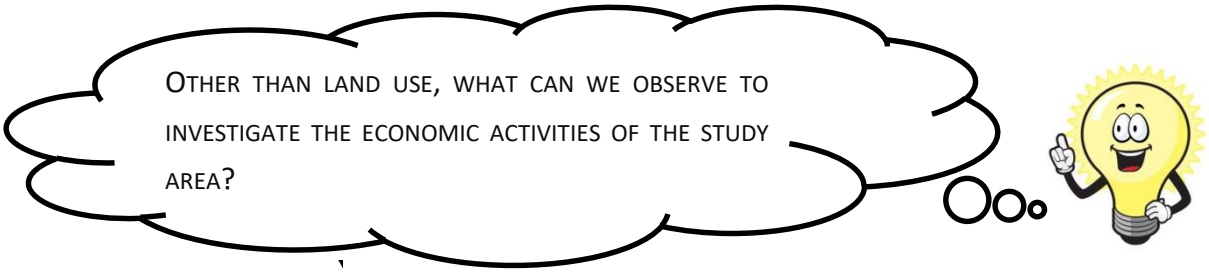
What is/are the merit(s) and demerit(s) of the above sampling method?

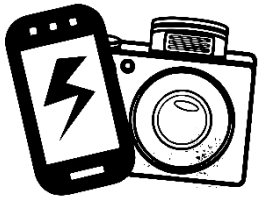
Merit(s):	**Demerit(s):**

Name of building: _____

	Types of economic activities	**Number of companies engaging similar business**	**% of total**
Manufacturing	1. Printing and printing-related industries/ Manufacturing of paper and paper products		
	2. Other manufacturing (e.g. plastic products/ glass fibre products/ metal products/ electronic components/ machinery and instrument/ jewelry/ textile/ stationery/ pharmaceuticals, food processing)		
Non-manufacturing	1. Trading (例：XX 實業、XX 洋行)		
	2. Storage (e.g. mini storage)		
	3. Art and education (e.g. gallery, studio, education centre)		
	4. Other non-manufacturing (e.g. retail sale, catering, advertising, design services, professional services, property management)		
Unable to identify			
		Total no. of companies: _____	100%

3. Other relevant field evidences:





Take photos when you conduct the fieldwork and write down the relevant field evidences in the box below.

e.g. *lease advertisements (bills), publicity materials of companies (easy-mount frames, posters, flyers), vehicle body advertisements, types of goods being loaded or unloaded.*

I found ……

STAGE 3: DATA PROCESSING, PRESENTATION AND ANALYSIS

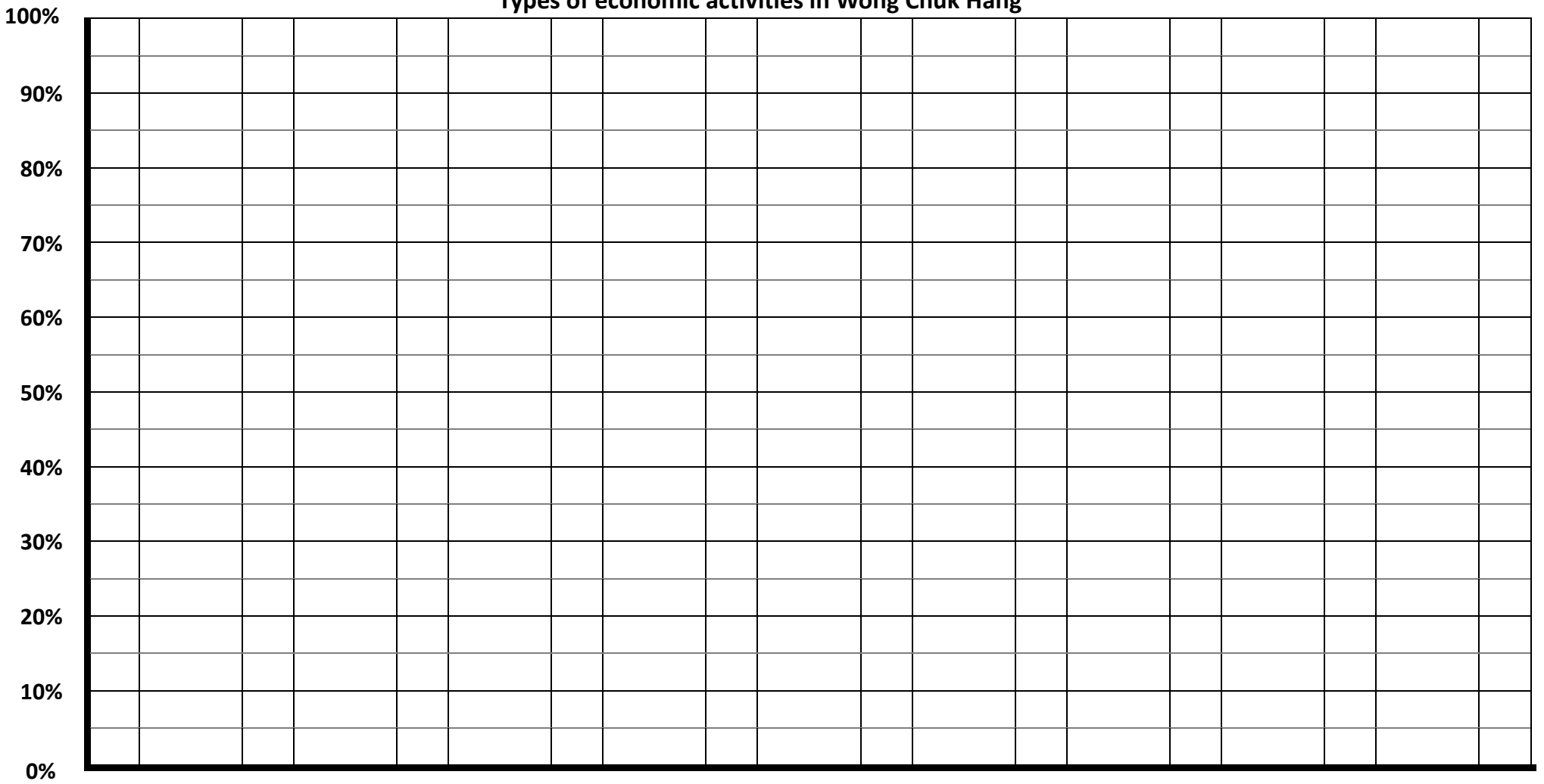
1. Process and merge the land use distribution map
2. With reference to the scheme below, display the proportion of manufacturing and non-manufacturing activities of the selected buildings (p.8)

	Type of economic activities	Colour
manufacturing	Printing and printing-related industries/ Manufacture of paper and paper products	
	Other manufacturing	
non-manufacturing	Trading	
	Storage (e.g. mini storage)	
	Art and education	
	Other non-manufacturing	
Unable to identify		

Group: _____

DATA PROCESSING – Types of economic activities in Wong Chuk Hang Use the compound bar graph below to display the data from p.6

Manufacturing		Non-manufacturing				Unable to identify
Printing / Manufacture paper (products)	Other manufacturing	Trading	Storage	Art & education	Other non-manufacturing	



3 Calculate the percentage of the each type of land use on the selected transect AB or CD

- Calculate the **distance percentages** of various land use of transect

  For example: To calculate the distance percentage of commercial land use

  Distance percentage of commercial land use

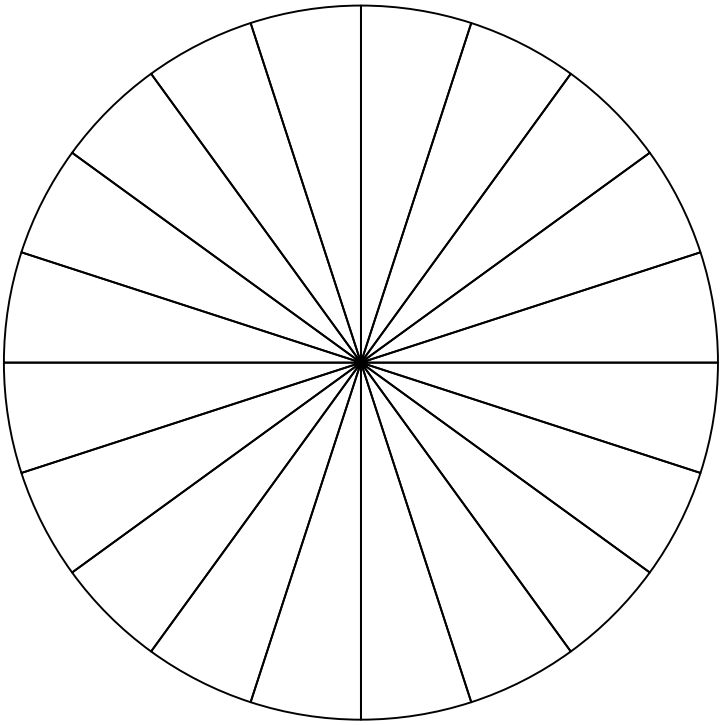
$$= \frac{\text{Length of commercial land use}}{\text{Length of transect}} \times 100\%$$

- And draw the distance percentages in a pie chart

Distance Percentage of the land use along the transect

Types	Percentage	Colour
Commercial		
Residential		
Industrial		
Government/Community/Institution		
Recreational		
Vacant		
Work in progress		
Transportation		

Pie chart of the distance percentage of land use along the transect



STAGE 4: DATA INTERPRETATION (DISCUSSION QUESTIONS)

1. Describe the percentages of industrial, commercial and work in progress (WIP) land uses in the study area. Account for the changes of industrial land use.

2. Referring to the compound bar graph (p.8), describe and explain the proportion of manufacturing and non-manufacturing industry.

3 Referring to P.6 the economic activities of selected buildings as examples, analyze the following phenomena.

i) What types of manufacturing industries are still located in the study area? Explain the reason.

ii) What types of non- manufacturing industries are still located in the study area? Explain the reason.

4. Explain whether your hypothesis in P.3 is valid or not.

5. Explain the impacts of the development of South Island Line on the future economic activities in Wong Chuk Hang.

	Positive impacts	Negative impacts
i) Industrial activities		
ii) Commercial activities		

STAGE 5: EVALUATION

1. Other than the data collected during the fieldwork, suggest other **(a) primary and (b) secondary data and information** necessary to enrich the present study.

2. Please use the table below to suggest the factors affecting the data reliability and validity, as well as the suggestion for improvement.

Factors affecting the data reliability and validity		Suggestion for improvement
Fieldwork date/ time ◆ Fieldwork date and time representative? ◆ Any impact by today's weather condition?		
Field site/ study area ◆ Field sites match with research topic? ◆ Field study area adequate?		
Location of data collection (Sampling) ◆ Sampling method in choosing field site appropriate? ◆ Location of measurement representative? ◆ Sample size sufficient?		
Data collection items/ methods ◆ Data collection items adequate to respond the enquiry questions? ◆ Are the data obtained from the data collection method(s) objective and without bias? ◆ Any inadequacy about the equipment/ instruments? ◆ Measurer using the equipment/ instruments correctly?		

Homework:

After the fieldwork, please organize this fieldwork experience in field trip diary on p.14-15, as a reference for the revision of field-based question.

Primary data collection methods

Data collection methods	Explanations		Examples
A) Observation	● To explore the details of research subject (people, things or environment) in a purposive and planned way, and usually record what you see with text, photos, sketch, maps. (Refer to other data collection methods listed below)		● Identification of surrounding environmental of a field site
B) Measurement	● To estimate or measure the physical quantity of the research subject. It usually requires the application of equipment or tools and data usually shown in certain standard or weights and measures.		● Measurement of the width of street and the building height
C) Counting	● To record the number of occurrence of a single item.		● Statistics of pedestrian flow at the pier
D) Category	● To classify based on the nature, characteristics and uses: ♦ to group the same or similar things; ♦ to separate different things.		● Types of goods sold in supermarket ● Customers (serving local residents and tourists) of different shops
E) Distribution (mapping)	● To group similar things according to the research topic (similar to "**D. Category"**); ● Only suitable for spatial representation (different from category); ● Useful in showing the mode of occurrence of research subject in a complex environment.		● Distribution of shops selling big fish balls in Cheung Chau
F) Scoring	● To quantify abstract or subjective concepts; ● To merge various data for easy comparison; ● Scoring items should include different aspects.		● Risk index of Cheung Chau to natural hazards ● Air Quality Health Index (AQHI)
G) Field sketching	● To draw directly at the field site to show what the data collectors looking at. Annotations related to the research subject are added to provide additional information.		● Draw the characteristics and formation of weathering landforms
H) Questionnaire	● Forms: face-to-face, telephone, written, etc.; ● Using questionnaire to understand the opinion of research subject; ● Larger sample size than "**I. in-depth interview**"; ● Mainly closed questions (with options available).	● To collect information by questioning; ● To obtain information which is difficult to be obtained through observations; ● To understand the rationales and opinions of interviewees.	● The major reasons for tourists to visit Cheung Chau ● The level of satisfaction among residents regarding the revitalization project
I) In-depth Interview	● To obtain information through face-to-face/ telephone interview; ● Smaller sample size than "**H.Questionnaire**"; ● Mainly open questions and forthcoming questions will change upon the answer of respondents.		● Opinions of District Council members on the future development of that district

Sampling Methods

	Probabilistic sampling methods ➢ *Need to know the size of population;* ➢ *Few differences among individuals;* ➢ *Individual has equal chance of being selected;* ➢ *Representativeness of data depends on sampling percentage.*			**Non-probabilistic sampling methods** ➢ *Size of population might not be relevant to the research objective;* ➢ *Chance of individual being selected is unknown;* ➢ *Representativeness of the results depends on the judgment of researcher in sample selection (Such as the correlation between samples and research targets).*		
Sampling methods	**Simple random sampling** (簡單隨機抽樣)	**Systematic sampling** (系統抽樣)	**Stratified Sampling** (分層抽樣)	**Quota Sampling** (配額抽樣/ 定額抽樣)	**Convenience Sampling** (便利抽樣/ 方便抽樣)	**Purposive sampling** (立意抽樣)
Explanations	To select sample from the **whole population randomly**. (using computer program, bamboo slip or random number table)	Each member of the whole population is sequentially numbered, then selected according to a **fixed, periodic interval**.	The whole population are classified according to the variable and divided into separate stratum. Then samples are selected randomly by proportion from each stratum.	The whole population are classified according to the variable and divided into separate stratum. Then desired number (quota) of samples are selected from each stratum.	Research subjects are selected due to convenience of recruitment.	Samples are selected according to research objectives and special requirements.
Examples	To choose a certain number of students to conduct questionnaires/ surveys according to the class number.	To measure the noise level of a street in a regular interval.	To group buildings according to their ages (e.g. above or below 50), and select a certain number of buildings in each group randomly.	To select a certain number of male and female customers, then record the amount spent in a shop.	To interview a certain number of relatives who work in mainland China To interview a certain number of passers-by on the street	To conduct an in-depth interview with a district councillor about the social problems of that district.
Remarks	Suitable for small population and few variations among samples (for relevant research objectives).	Suitable for large population (hidden cyclic ordering which may affect the representativeness of data).	Effectively show the relationship / effect between variables.	Effectively show the relationship / effect of variables, but the characteristics and size of samples are judged subjectively.	Should not generalize the data to larger population	Suitable for qualitative research (data is easily influenced by the subjective judgment of researcher)

My Field Trip Diary

- Related modules: Changing Industrial Location – How and why does it change over space and time?

- Key point of fieldwork/topic: _____

▪ Date:_____ (Weekday/ Public holiday) ▪ Time:_____ ▪ Field site: _____	▪ Weather conditions:
Is the above planning appropriate for the fieldwork?	

- Primary data:

Data collection method	**Data collected**	**Equipment/ Material (if any)**	**Merits☺/Demerits☹ of the data collection method (give examples)**	**Suggestion for improvement (give explanations)**

- Secondary data:

Data collected	Use	Data obtained from
Apart from the above, what other secondary data could be used for further investigation?		

- Sampling method (if any):

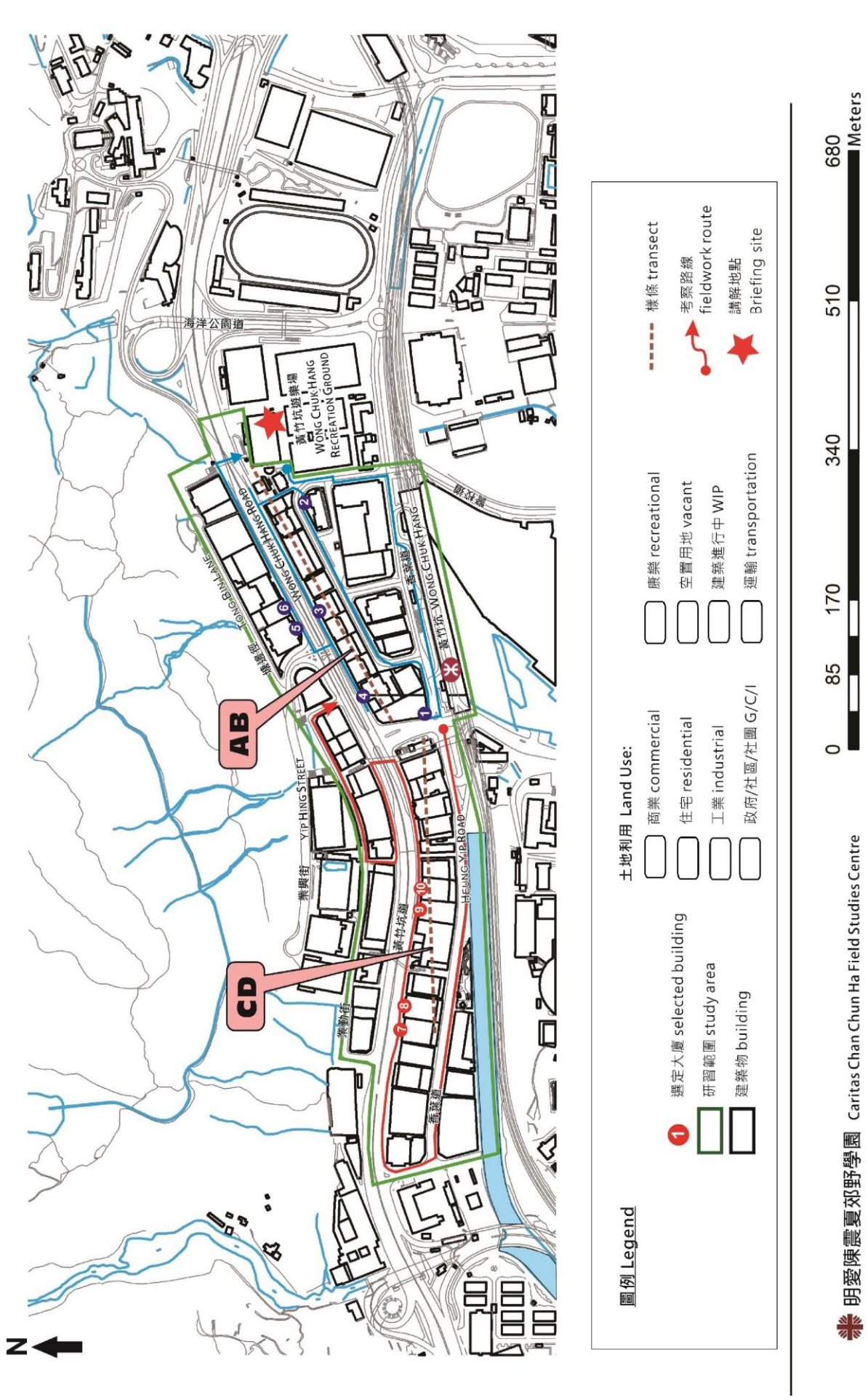
Sampling method	Applied in the following	Merits☺/ Demerits☹

- Data processing and presentation:

Type of graph/ chart	Content shown and function of graph/chart	Merit☺/ Limitation☹

- For deeper learning or further study, I suggest modify the following aspects.

		Suggestion (give examples)
❑	Key point of fieldwork/ topic	
❑	Data to be collected and method of data collection	
❑	Date and time of fieldwork	
❑	Field site	


轉變中的工業區位--黃竹坑
Changing Industrial Location— Wong Chuk Hang
N
AB
CD
海洋公園道
黃竹坑遊樂場
WONG CHUK HANG RECREATION GROUND
LONG BIN LANE
YIP HING STREET
業興街
業勤街
黃竹坑道
香葉道
HEUNG YIP ROAD
WONG CHUK HANG
圖例 Legend
土地利用 Land Use:
商業 commercial
住宅 residential
工業 industrial
政府/社區/社團 G/C/I
康樂 recreational
空置用地 vacant
建築進行中 WIP
運輸 transportation
樣條 transect
考察路線 fieldwork route
講解地點 Briefing site
選定大廈 selected building
研習範圍 study area
建築物 building
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85
170
340
510
680
Meters
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