## Geography: AR Sandbox and the development of map skills

## <u>Junior Secondary Geography Module (I): Food Problem - Can We Feed Ourselves?</u> <br/> Graded Worksheets (Level 1): Study by using Augmented Reality (AR) sandbox >

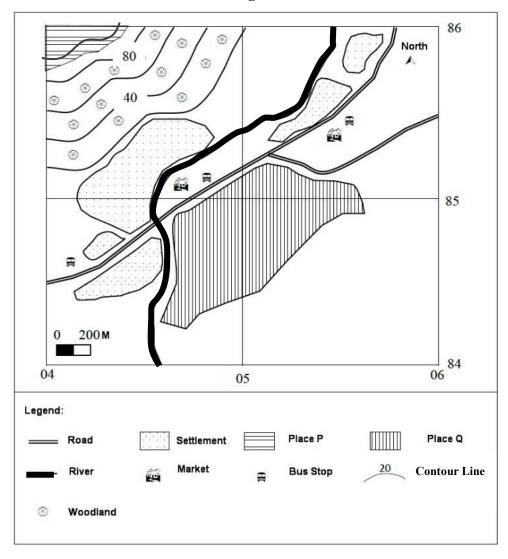
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## **Background Information:**

Fig. 1a shows Area X in a certain area of Hong Kong. Suppose you are a farmer who is planning to choose a place suitable for farming between Place P or Place Q in Area X. Before arriving in the Area for a field trip, you would like to find out the local developmental environment for farming by studying the AR sandbox.

Fig. 1a



AC	cuvity 1:
	dy Fig.1a, locate each settlement with stones and the following items with
1.	Place P 3. Market 5. Settlement Place Q 4. Bus Stop
	etivity 2:  ady the AR sandbox and Fig. 1a, and complete Questions 1 to 5.
1.	What method does the AR sandbox use to display altitude?
	<ul> <li>□ A. Contour method</li> <li>□ B. Layer tinting</li> <li>□ C. Both of the above*</li> </ul>
2.	What color does the AR sandbox use to represent highlands?
	<ul> <li>□ A. Dark brown*</li> <li>□ B. Light brown / yellow</li> <li>□ C. Green</li> </ul>
3.	What color does the AR sandbox use to represent lowlands?
	<ul> <li>□ A. Dark brown</li> <li>□ B. Light brown / yellow</li> <li>□ C. Green*</li> </ul>
4.	Which of the following places (and nearby areas) have denser contours?
	☐ A. Place P* ☐ B. Place Q
5.	Which of the following places (and nearby areas) has a steeper relief?  A. Place P*  B. Place Q
6.	Which of the following descriptions about contour lines is correct?  A. The denser the contour, the gentler the relief  B. The denser the contour, the steeper the relief*
7.	Which do you think is more suitable for farming activities? Place P or Place Q? Why? Place Q is more suitable for farming activities, because Place Q: has a relatively gentle relief and it facilitates the use of agricultural machines.
	is closer to rivers, which can provide water for irrigation.
	is closer to roads and markets, which is convenient to transport farming inputs and outputs.

is closer to settlements and easier to employ labour for agricultural activities

## **Activity 3: Extended Activity**

If time allows, teachers may let students work in groups and use the AR sandbox to freely pile up the following different landform. Students can observe and record the changes in contour lines and characteristics of various landforms. Teachers may also use the AR sandbox to output contour maps of various landforms for students to study.

