Land use on aerial and large-scale maps

What are aerial photographs

An aerial photograph is a photograph of the Earth's surface taken from the air, usually from an aeroplane or drone.

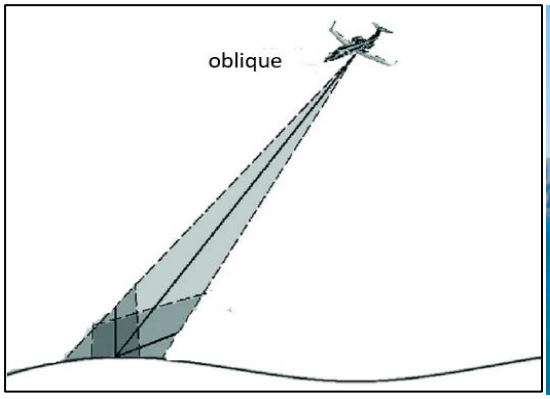
- Taken from the air
- Show real features as they appear on the ground
- Cover a small area in great detail
- Do not always show place names or symbols
- Features can be seen from different angles

Types of aerial photographs

Oblique aerial photographs

An oblique aerial photograph is a photograph of the Earth's surface taken from the air at an angle, not straight down.
An oblique aerial photograph is a picture taken from an aeroplane or drone at a slanted angle.
It shows the side view of buildings, trees, hills, and other features, not just the top view.

- Taken at an angle
- Show the front and sides of objects
- Give a 3-dimensional (3D) view
- Help us see the height and shape of features
- Cover a smaller area than maps

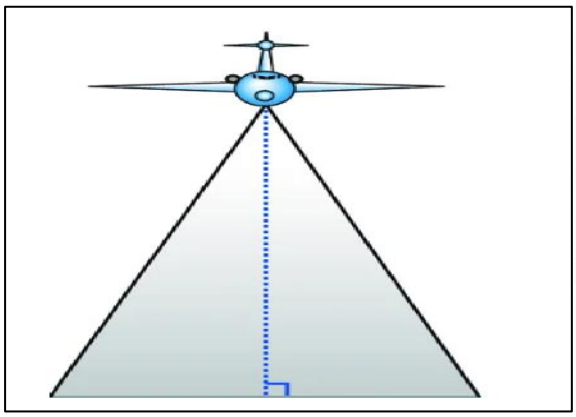


Vertical aerial photographs

A vertical aerial photograph is a photograph of the Earth's surface taken from the air looking straight down.
A vertical aerial photograph is a picture taken from directly above (from an aeroplane or drone).
It shows the land as if you are looking straight down from the sky.

- Taken straight down (vertically)
- Show a top view of the Earth's surface

- Images are more accurate than oblique photographs
- Sizes and shapes of features are more correct
- Easier to compare with maps
- Useful for measuring distance and direction (with scale)



How is Information shown from aerial photos

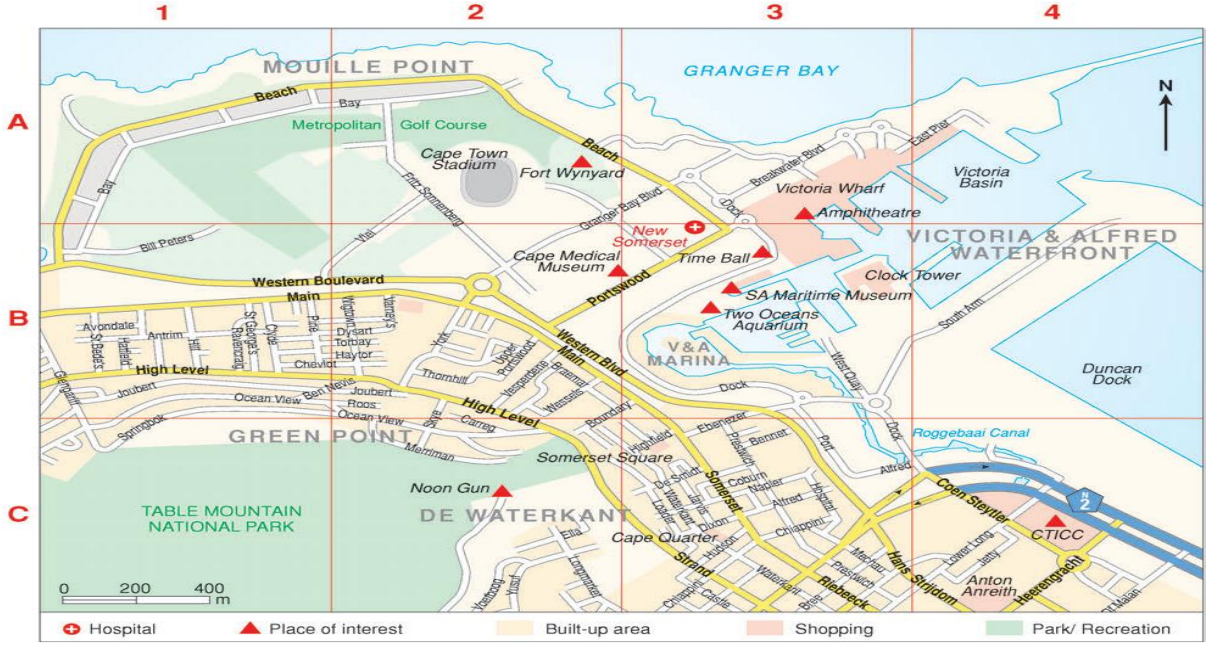
Natural features on aerial photos

Natural features have more uneven shapes.
Rivers are usually dark and bend and twist over an area.
Clear water appears darker than muddy water, because muddy water reflects more sunlight.
Wet soil appears darker than sandy soil.
Trees usually look dark. Planted forests have straight edges and a regular pattern.
Natural forests are more uneven and scattered.
Shadows on a vertical aerial photograph indicate the shape and size of objects.
Shadows also tell you about direction. The shadows fall in the direction opposite to the position of the sun.
Shrubs and trees have a dotted appearance.

Constructed features

Constructed features usually have straight edges.
Constructed features show even patterns on the land.
Main roads are normally straight with few curves.
Secondary roads are narrower and may have more bends.
Roads often meet other roads at a right angle. Railways have more gradual connections.
Fields show a regular pattern of different colours and shades.
Fields with tall plants are darker than fields with young, short plants.
Cultivated land and water have a fine, smooth appearance.

How is Information shown from large scale maps



Refer to the map above

1. What is meant by a large-scale map?
2. Give one example of a large-scale map.
3. State two reasons why large-scale maps are useful.

Map Symbols and Key

1. Name two man-made features shown on the map.
2. Name one natural feature shown on the map.
3. Why is the key/legend important when interpreting a map?

The school and the clinic

1. Which place is further from the police station: the post office or the park?
2. Explain how you measured the distance on the map.

Position and Location

1. Describe the position of the sports field in relation to the school.

Complete the sentence:

1. The police station is _____ of the main road.
2. Which two features are located next to each other on the map?

Application and Thinking Skills

1. Suggest the best route from the school to the clinic. Give one reason for your answer.
2. Why would a tourist find this map useful?
3. Explain one advantage of using a large-scale map instead of a small-scale map in a town.
4.

Study the large-scale map and answer the questions:

1. Name one natural feature shown on the map.
2. In which direction is the shopping centre from the school?
3. Calculate the distance between the clinic and the police station. Show your working. (3)
4. Explain one use of this map for local residents