

Lesson – Landscapes

THE FOLLOWING VIDEO HAS BEEN APPROVED FOR
ALL AUDIENCES
BY THE EARTH SCIENCE TEACHERS ASSOCIATION OF AMERICA, INC.

THE VIDEO HAS BEEN RATED


1	INTELLIGENT UNDER 15 REQUIRES TEACHER ASSISTANCE
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STRONG EARTH SCIENCE LANGUAGE, DETAILED DIAGRAMS, AND SUPER AWESOMENESS.

- I can explain the differences between the three main landscapes
- I can illustrate the three main types of stream drainage patterns & landscape features associated with them
- I can use the Landscape Regions of NYS Map in the ESRT
- I can contrast uplifting & leveling forces
- I can describe the effects of humid & arid climates on landscapes

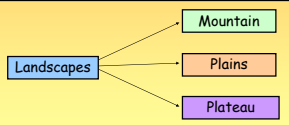
Landscapes

Landscapes - are the features of Earth's surface



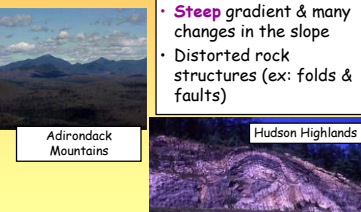
Measuring Landscapes

Landscapes are divided into 3 major types: by gradient, elevation, & rock structure




Mountains

- An area of **high** elevation
- **Steep** gradient & many changes in the slope
- Distorted rock structures (ex: folds & faults)




Plateau

- **High** elevation
- **Level slope** or gradient
- Horizontal layers



Plain

- Usually made of sedimentary rocks
- Low elevation
- Level surface



Light green shows the Central Upland region.
Dark green indicates the Inner and Outer Lowlands region.
Yellow shows the region covered by the Late Pleistocene glacier.


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3 MAIN types of Stream Drainage Patterns

DENDRITIC DRAINAGE

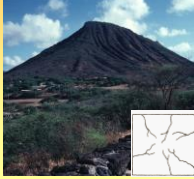
- PLAINS & PLATEAUS (Rock layers are HORIZONTAL)

- Branching similar to roots of trees



TRELLIS DRAINAGE

-Where rocks of different hardness are folded or faulted

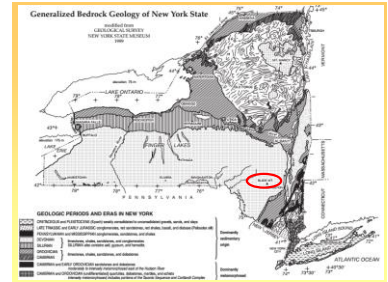
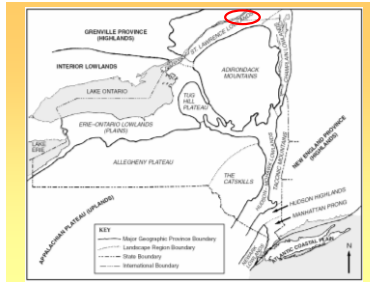
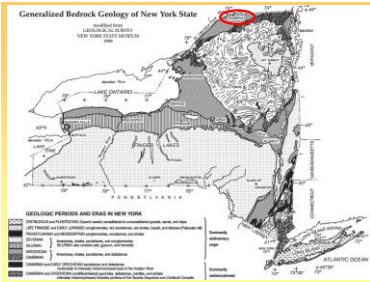
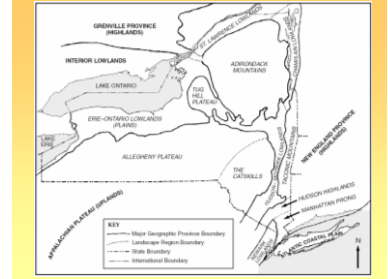


RADICAL DRAINAGE

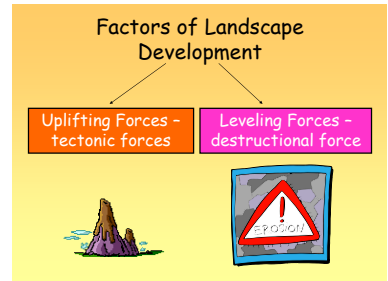
- Occurs in domed structures (Volcanoes) with little difference in rock resistance



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Uplifting Forces

• Start **below** or **within** Earth's lithosphere where they make new rocks

- Example:

- Volcanic action
- Earthquakes



Leveling Forces

• Level out or **lower** Earth's surface by breaking down rocks

- Example:

- Weathering
- Erosion
- Deposition
- Sinking



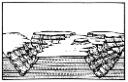
Sinking marshes in Louisiana

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Effects of Climate

• **Arid climates** -

- Little vegetation to hold sediments
- Steep slopes & sharp angular landscape features



• **Humid climates** -

- Vegetation holds sediments in place
- Smoother & rounder landscapes



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