

Definitions:

* Hazard?

* Hazard Risk?

* What may affect hazard risk?

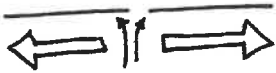
PLATE BOUNDARIES

A. **DESTRUCTIVE BOUNDARY** - process?
- feature?
→ oceanic → continental.



What if oceanic - oceanic?

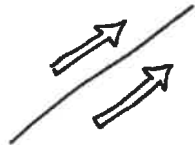
B. **CONSTRUCTIVE BOUNDARY** - process?
- feature?



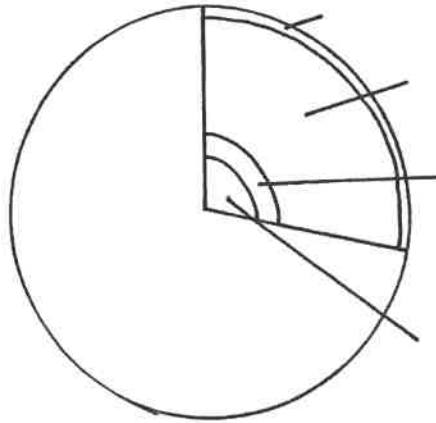
C. **COLLISION BOUNDARY** - process?
- feature?



D. **CONSERVATIVE BOUNDARY**
- process?
- feature?



STRUCTURE OF THE EARTH.



TYPES OF CRAST. - Differences?

OCEANIC CRAST 'v' CONTINENTAL CRAST.

PLATE MOVEMENTS - REASONS.

- (i) CONVECTION CURRENTS
- (ii) SLAB PULL / RIDGE PUSH.

TECTONIC HAZARDS.

DISTRIBUTION OF EARTHQUAKES / VOLCANOES

EARTHQUAKES.

Focus?

EPICENTRE?

MEASURING EARTHQUAKES?

WHY DO PEOPLE CONTINUE TO LIVE IN AREAS PRONE TO EARTHQUAKES?

REASONS WHY CONTINUE TO LIVE NEAR VOLCANOES

FARMING

TOURISM

SOCIAL REASONS

MINING.

GEOTHERMAL ENERGY.



FACTFILE

CHILE EARTHQUAKE

HAZARD MANAGEMENT

What is meant by:-

* MONITORING AND PREDICTION?

* PROTECTION?

* PLANNING?

EFFECTS

RESPONSES

PRIMARY

IMMEDIATE

SECONDARY

LONG TERM

TECTONIC HAZARDS

(A) MONITORING & PREDICTION. → VOLCANOES

↓
EARTHQUAKES.

(B) PROTECTION → VOLCANOES.

↓
EARTHQUAKES

FACTFILE

NEPAL EARTHQUAKE

EFFECTS

RESPONSES

PRIMARY

IMMEDIATE

SECONDARY

LONG TERM

(C) PREPARATION. → VOLCANOES.

↓
EARTHQUAKES .

→ EDUCATION

→ EMERGENCY SERVICES

→ SECURING

→ EMERGENCY SUPPLIES

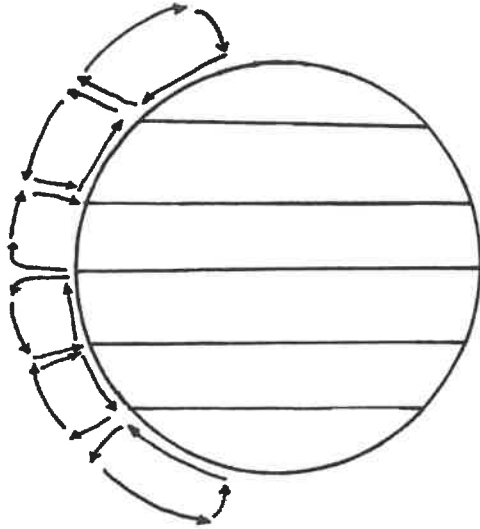
→ HAZARD MAPPING

→ EVACUATION PREPARATION.

GLOBAL ATMOSPHERIC CIRCULATION.

High Pressure = ?

Low Pressure = ?



How can the above explain the weather of:-

* RAINFORESTS?

* DESERTS?

TYPHOON HAIYAN

Where?

When?

Category?

Other info.

PRIMARY EFFECTS.

SECONDARY EFFECTS.

IMMEDIATE RESPONSES

LONG TERM RESPONSES.

TROPICAL STORMS.

→ Where do we find - hurricanes? cyclones? typhoons?

→ What conditions are required for tropical storm formation?

→ What pressure systems are tropical storms?

WEATHER HAZARDS.

REDUCING THE EFFECTS OF TROPICAL STORMS

→ MONITORING

→ PREDICTION

→ PROTECTION

→ PLANNING.

→ Sequence of formation of Tropical Storms?

→ What are the key features of tropical storms?

→ As a tropical storm approaches a place how will the weather change as it reaches / passes over?

→ What happens to tropical storms as they move over land.

ECOSYSTEMS

Definition?

KEY TERMS:-

- * PRODUCER
- * CONSUMER
- * DECOMPOSER
- * NUTRIENT CYCLE
- * HERBIVORE
- * CARNIVORE
- * OMNIVORE
- * FOOD CHAIN
- * FOOD WEB



EXAMPLE OF CHANGES TO THE BALANCE IN EPPING FOREST:-

INTERDEPENDENCE IN ECOSYSTEMS

→ eg. Knock on impact of change in species number due to disease.

→ Reintroduction of a species - GREY WOLVES (Yellowstone)?

THE LIVING WORLD

Definition - BIOME:-

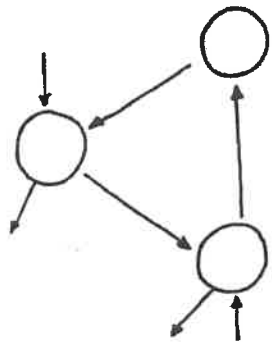
- Controls on Biome Distribution
- (i)
 - (ii)
 - (iii)
 - (iv)
 - (v)

REASONS FOR LOCATION OF:-

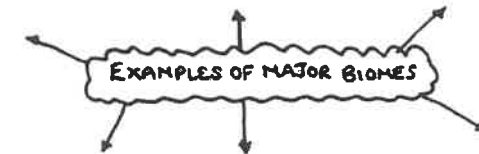
↳ TROPICAL RAINFORESTS.

↳ DESERTS.

THE NUTRIENT CYCLE

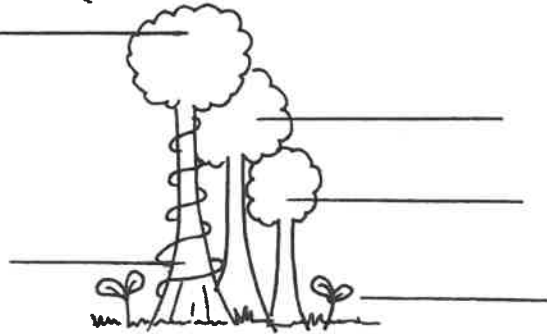


EXAMPLES OF INTERACTIONS BETWEEN THE LIVING OR NON-LIVING WORLD



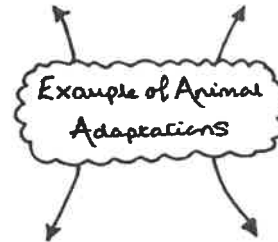
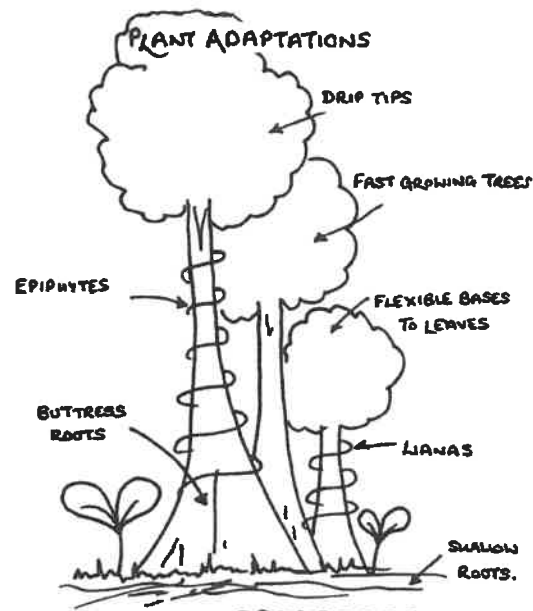
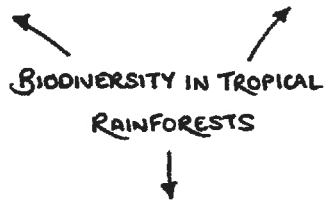
Rainforest Climate.

Rainforest structure / characteristics.

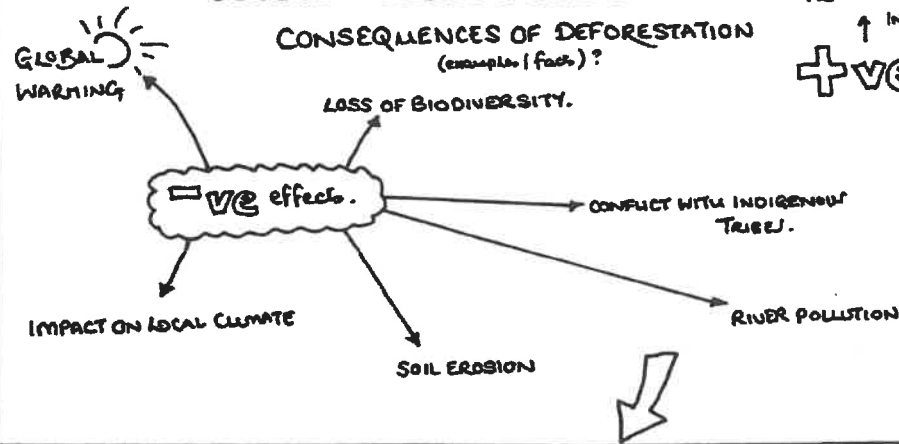


SOILS?

Examples of Interdependence in Rainforest.



TROPICAL RAINFORESTS



Case Study: Malaysia

Location/Size:-

Deforestation Rates:-

CAUSES OF DEFORESTATION

↳ LOGGING.

↳ ENERGY.

↳ MINING.

↳ COMMERCIAL FARMING.

↳ ROAD BUILDING.

↳ POPULATION GROWTH.



MANAGING RAINFORESTS - What is Sustainable Management?

↳ Selective logging

↳ ECOTOURISM

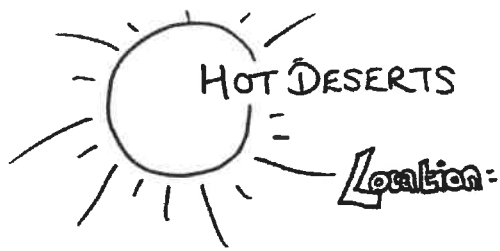
↳ International Agreement

↳ DEBT REDUCTION

↳ Replanting.

↳ AGROFORESTRY





Examples =

Desert Climate → TEMPERATURE?

↳ RAINFALL?

REASONS FOR DESERT CLIMATE (30°N/S - HIGH PRESSURE)

Desert Soils = Characteristic →

↳
↳

INTERDEPENDENCE IN DESERTS

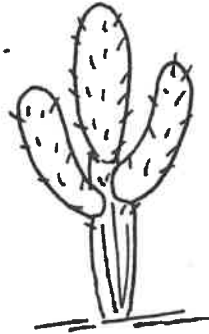
EXAMPLES:

DESERTS AND DESERTIFICATION

DESERT PLANTS AND ANIMALS.

PLANTS

(i) Cacti - eg:-



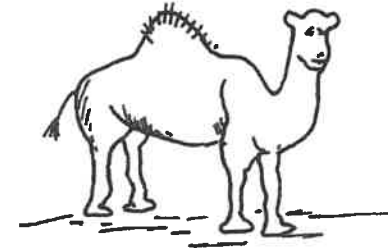
(ii) Ephemerals

What need to adapt to?

- ↳ DRY CONDITIONS
- ↳ HIGH TEMPERATURES
- ↳ UNRELIABLE RAINFALL.

ANIMALS.

(i) CAMELS



(ii) DESERT FOX

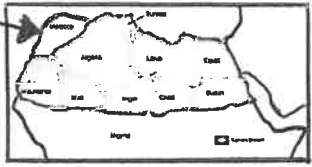
(iii) KANGAROO RAT

⇒ REMEMBER deserts are
FRAGILE ENVIRONMENTS
(i.e. easily disturbed) unsustainable
human life can threaten these
environments.

BIODIVERSITY IN DESERTS

Case Study: THE MOROCCAN DESERT

MOROCCO



LOCATION?

KEY FACTS?



ALSO:-
 * ↑ demand for water as pop. grows.
 * tourism issues e.g. soil erosion.

(Remember - you MUST know specific facts & figures for case studies.).

Desert 'Fringe' Areas and Desertification

Borders of desert are drylands e.g. SAHEL area (borders - Sahara Desert).
 What threats are these fragile areas under?

- (i)
- (ii)

What is DESERTIFICATION?

Causes of Desertification

(i) CLIMATE CHANGE.

(a) Rainfall

(b) Temperature.

(ii) HUMAN ACTIVITIES.

(a) Over-cultivation

(b) Overgrazing

(c) Demand for fuelwood.

SOIL FORMATION

EXAMPLE → Desertification in Darfur - SUDAN

TACKLING DESERTIFICATION.

(i) LANDMANAGEMENT =

Eg's?

(iii) TREE PLANTING =

Eg's?

(ii) WATER MANAGEMENT =

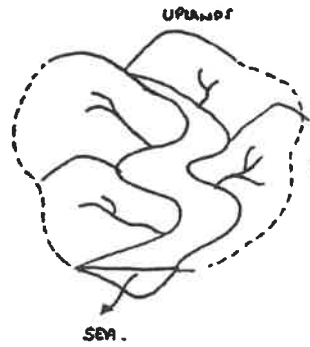
Eg's?

(iv) APPROPRIATE TECHNOLOGY

Eg's?

ALL INVOLVE TEACHING LOCALS HOW TO BEST MANAGE LAND IN A SUSTAINABLE WAY.

DRAINAGE BASINS - Features?

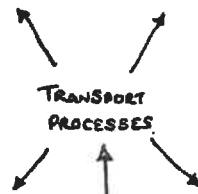
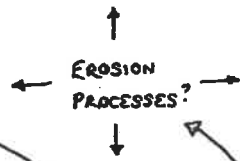


RIVER LONG PROFILE?



CHANGES DOWNSTREAM?

- width?
- depth?
- velocity?
- discharge?
- sediment size?



CROSS PROFILE?

	UPPER	MIDDLE	LOWER
Valley.			
Channel.			

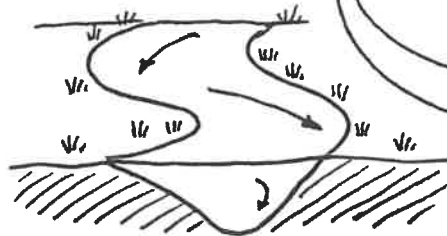
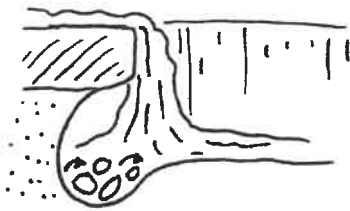
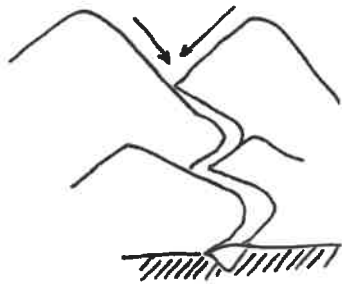
DEPOSITION - where might occur? why?

RIVER PROCESSES
& LANDFORMS.

LOWER COURSE

UPPER COURSE

MIDDLE COURSE



RIVER MANAGEMENT

① HARD ENGINEERING (definition?)

② SOFT ENGINEERING (definition?)

- Types: (i)
(ii)
(iii)
(iv)

- Types: (i)
(ii)
(iii)
(iv)

COSTS

BENEFITS

COSTS

BENEFITS

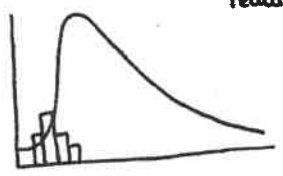
DRAINAGE BASIN SYSTEM (How does water move through)

→ INPUTS:-

→ THROUGHPUTS/ FLOWS:-

→ OUTPUTS:-

HYDROGRAPHS.



Features of a hydrograph?

Why might these graphs be different?



What is lag time?

What will affect lag time?



BANBURY CASE STUDY.

Where? Why need protecting?

- Strategies used? (i)
(ii)
(iii)
(iv)
(v)

Successful?

COSTS

BENEFITS

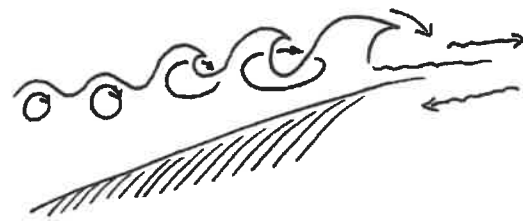
FACTORS AFFECTING FLOOD RISK

Human

Physical.



Wave Formation and Type

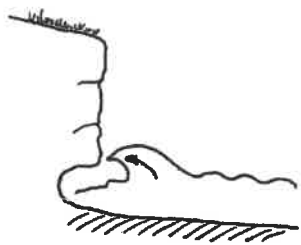


Factors affecting wave strength:-

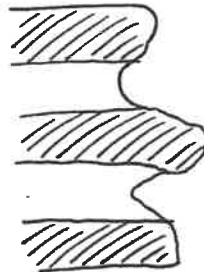
- WIND SPEED
- DURATION
- FETCH

COASTAL EROSION FEATURES

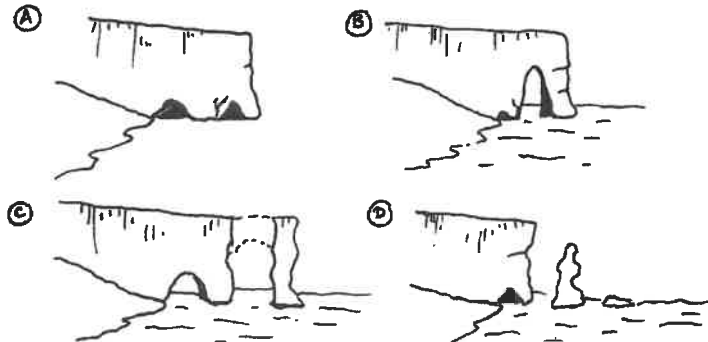
① Cliffs and Wave-cut platforms.



② Headlands & Bays



③ Erosion of a Headland.



DESTRUCTIVE WAVES



Characteristics?

↓
ERODE THE BEACH

CONSTRUCTIVE WAVES.



↓
BUILD UP THE BEACH.

COASTAL PROCESSES AND LANDFORMS.

DEPOSITION

WHAT
UNDER CIRCUMSTANCES
WILL MATERIAL BE DEPOSITED?

-
-
-
-

WEATHERING & EROSION

① Weathering is:-

(a) CHEMICAL WEATHERING

(b) PHYSICAL WEATHERING.

② Coastal Erosion is:-

(a) ABRASION

(b) ATTENTION

(c) HYDRAULIC ACTION/POWER

(d) CORROSION.

MASS MOVEMENT.

→ SLIDING

→ ROCKFALLS

→ SLUMPING.

LONGSHORE DRIFT → transport of material along the coastline

