# <u>Physical</u> <u>Geography</u>

### Waterfall

- \* Upper stage, Powerscourt
- \* Vertical drop
- Differential Erosion
- \* Overhang
- \* Hydraulic Action
- \* Abrasion
- Plunge Pool
- \* Eddying
- Waterfall retreat/Headward
  Erosion
- \* Gorge
- \* Rejuvenation, old stage
- \* Hanging Valley
- \* Glaciation
- \* Tectonic Uplift
- \* Diagram

# <u>Delta</u>

- \* Old stage, L. Tay
- Deposition/Alluvium
- \* River Mouth
- \* Lacustrine (lake)
- ✤ Marine Delta
- \* Tides cant remove
- \* Decreased velocity
- \* Sorting
- \* Flocculation
- Sottomset beds(fine)
- $\bullet$  Foreset beds
- $\star$  Topset beds
- \* Estuarine
- \* Birdsfoot
- \* Acurate

### Karst Feature

- \* Limestone, Slovenia
- \* Karst definition
- \* Hydraulic Action
- $\diamond$  Solution
- \* Carbonation
- \* Weak carbonic acid
- \* Calcite
- \* Evaporation
- \* Dripstone
- Straw
- Stalactites
- \* Stalagmites
- \* Columns/Pillar
- ✤ Curtain
- \* Ailwee Cave, Clare

#### Human Inter Surface:R.Rhine

- \* Very important
  - EU,1300km, Alps to Rott
- \* Levees, Deposition
- ✤ 50km straightened
- \* Speed, Barges, erosion
- ✤ Building 85% floodplain
- \* Polders river level above
- \* 13 HEP increase erosion
- \* Farming: removed hedges
- Surface runoff
- ✤ Floods '95, heavy rain
- Snow melt Alps
- \* Bonn flooded 2m
- \* Netherlands evacuated
- \* Flood prevention
- \* Improved dykes, trees

#### Natural Gas

- \* Fossil Fuel, sedimentary rocks
- Less CO2, anticline/fault traps
- ✤ 25% Irish energy demands
- \* Geologist test, exploring well
- \* Kinsale Head '78 50km
- Marathon sell Bord Gáis
- Seven Heads '03 30km
- ✤ Corrib 70km Mayo
- ✤ Remote control 2/3 Kinsale, delayed
- Private venture Irish gov. not involved, not success
- Tax relief,25% corporation tax
- ✤ Interconnector Dublin Scotland '02 85% of our Gas
- ✤ 10% demands met Irish gas
- \* Electricity, revenue, jobs
- \* Industrial development West

#### Rock Type and Landform

- Sed, organic, mechanically
- Limestone, stratified, sea skeletons, warm ocean
- Cemented + compacted
- Carboniferous 50% cal/car
- ✤ Burren Karst landscape
- Limestone plateau youthful stage, well jointed
- ✤ 350ma, soil removed glaciers, Nat Heritage
- ✤ 60% bare rock, porous
- Carbonation
- Solution
- \* Surface freeze thaw
- Underground drainage system
- Unique flora orchids, fauna pine marten
- \* Farming transhumance
- \* REPS, Aillwee Cave

#### <u>Earthquakes</u>

- Shaking termor, plates
  stick jerk past
- Shallow less 80km, deep
- \* Seismograph, epicentre,
  - focus, seismic gaps, lasers
- LA 1994 4.30am,6.7Richter scale, S.A fault
  - Pacific/American plate
- \* Aftershocks reaching 4
- 60 killed, 25,000
  homeless, 9,000 injured
- 40,000 no water,3m no elect,roads destroyed, natural disaster

## <u>Volcanoes</u>

- Eruption of material
  Earth's interior
- Lava: basic + acidic,
  gases, pyroclastic
- \* Lahars, Nuee Ardente
- \* Extrusive: Central vent
- \* Crater, caldera, fumaroles
- Cinder, composite
  - (ash/cinder), dome, shield
- Intrusive:Batholith
- Largest pluton 20km
- \* Leinster 120km dub-kk
- Dub, WW mts, granite,
  Lugnaquilla quartzite

#### **Plates Tectonics**

- Plates, convection current
- S boundaries: Divergent
  constructive mid-ridge
- Convergent destructive subduction
- ✤ O-O island arc Japan
- \* O-C volcanic mts Andes
- \* C-C fold mts Himalayas
- Transform conservative
  - earthquake, San Andreas
- Volcanoes: Pacific ring
  - of fire
- \* Hotspots