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| **Unit** | ***Chapter*** | Topics | Labs/Activities |
| **Introduction** | ***Enviro 101*** | GraphingExponents and Scientific NotaitonAPES MathTragedy of CommonsEnviro. Disasters | Tragedy of Commons SimulationGraphing ActivitiesEnviro. Disaster Projects |
| **Geosphere** | ***Earth Structure*** | Earth Structure HistoryTypes of RocksContour MapsVolcanoesSulfur CyclePlate TectonicsEarthquakesRadioactive Decay | Volcano LabEarthquake Epicenter ActivityHalf-Life Candy Lab |
| ***Land Use*** | National ParksSustainable Use LandsUrban DevelopmentMiningNIMBY and Solid Waste | Movie: Secret YosemiteNational Park TycoonCooking Mining LabSolid Waste Inventory (Ben Smith) |
| ***Farming*** | SoilNitrogen CyclePesticidesOrganic FarmingFarming PollutionBiomagnificationMonoculturesFertilizer | Soil Lab (Ben Smith Modified)Movie: Food Inc.Industrial vs. Organic Farming DBQ |
| ***Energy*** | Power Unit ConversionsNonrenewable vs. Renewable EnergyFracking | Energy Source Debate ProjectMovie: Who Killed the Electric Car |
| **Biosphere** | ***Biomes*** | Terrestrial and Aquatic BiomesTemperature and Rainfall | Biome Presentations |
| ***Energy Flow*** | Food ChainsFood WebsBiodiversityEnergy ConversionsEcological Succession | Fad Diet ProjectsBiodiversity with Cars ProjectEcological Succession Flip BooksYellowstone Food Web Project (Ben Smith) |
| ***Populations*** | Invasive SpeciesMainland vs. Islands DiversityHuman PopulationAge-Structure DiagramsLogistic vs. Exponential | Non-Native Species ProjectHabitat Islands Project (Ben Smith)Movie: India’s Missing GirlsPopulation Growth DBQ |
| ***Toxicology and Disease*** | LD50Various MutagensVarious Important Diseases (HIV, Influenza, etc) | LD50 Lab – Black worms and nicotineDisease InvestigationAIDS LabPlague Inc. iPhone Game |
| **Atmosphere** | ***Wind and Weather*** | Wind CellsCoriolis EffectHurricanesBiome Influences | Be a Meteorologist Proejct |
| ***Global Warming*** | Layers of AtmosphereCarbon CycleCarbon Sinks | Movie: Inconvenient TruthEcological FootprintGlobal Warming: Fact or Fiction DBQ |
| ***Air Pollution*** | Types of SmogNOx, SOxCFCsAir Pollution MathOzone | Lung Model ActivityAir Quality Lab (Ben Smith)Particulate Matter Lab (Ben Smith) |
| **Hydrosphere** | ***Water Uses*** | Water CycleSewersWater Privatization | Salinization Lab – Mung Beans(Ben Smith)Planet Earth – Shallow Seas and Deep OceansMovie: Blue GoldWater DBQ |
| ***Water Pollution*** | Water TreatmentWater Treatment MathOcean Acidification | Lab: Water Quality Testing (Dissolved Oxygen)What’s in Your Water Activity (Computer Lab)Movie: Erin Brockovitch |

**AP EXAM = MAY 4th 2015!!!**

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