

## Science G—Weekly Subject List

Week	Subject
1	substances/properties/how the world changes/atoms/molecules/compound/mixture/reaction/states: solid, liquid, gas/melting point
2	air pressure/Boyle/physical and chemical properties/separation techniques: distillation, chromatography, centrifuge
3	separation techniques: electrolysis/how things work/proton/neutrons/electrons/periodic table/metal/metalloid/non metals/noble/organic chemistry
4	elements/compounds/how shells work/ shells: ionic bonding and covalent bonding/pooling electrons/ions/covalent/crystals/nuclear reactions/radioactive
5	history of atoms/how things happen/reactions/endothemic/exothermic/activation energy/catalysts/balancing equations/sample reactions
6	reaction types: trading places and breakdown/oxidation/reduction/combustion/acid/base/salt/ph scale/acid indicator/soap/weak bases
7	reactions/polymers/carbon/DNA/carbon dating/metal properties/alloys/steel/reactivity/gases
8	non-metal samples/chemical curiosities/how to discover what a substance is/chemical universe/elements from stars
9	rocks/types/greenhouse gas/animal/plant chemistry/body: food/hormones/bacteria/chemistry history/into to physics/beginning of atoms/Rutherford
10	protons/positive charge/quarks/gluons/feel force/speed/velocity/acceleration/mass/momentum/force types/friction
11	Newton's laws/inertia/work/machines: pulley, wheel, lever/gravity/weight/mass/force/air resistance
12	center of gravity/pressure/problems with pressure/volume/density/displacement/energy/energy types/energy transfer
13	fossil fuels/alternative fuels/power/thermal/condense/temperature vs. heat/conduction/radiation
14	wave/medium/oscillation/transverse/electromagnetic spectrum/light/colors/reflection/angle of incidence
15	total internal reflection/refraction/lenses/hearing/frequency/echoes/sonar/light vs sound/electrifying/large/static/attract
16	electric current/terminals/electrolyte/volts/circuit/series/current/how to draw/magnetic force/field/lines/magnet earth/electromagnetism
17	space/stars/sun/orbits/season/moon/year/solar system/comets/physics history/Biology: about life/jobs and inventions/seven processes/classification/animal kingdom
18	vertebrates/plant kingdom/animal vs plant cells/organs/organisms/cell division/mitosis/virus/protists/bacteria/microbes/medicines
19	skeleton/muscles/joints/nervous system/senses/digestion/respiration/circulation/reproduction/genetics
20	animal movement and life/plants parts/leaves/plants reproduce/spores/clones/ecology/habitat/ice/keystone species
21	food chain/web/pyramid/climate change/earth/maps/season/day-night/inside earth/crust
22	rock types/resources/metals/building materials/fossil fuels/energy/volcanoes/volcano variations/hot springs/volcanic islands/monitoring volcanoes
23	earthquakes/how earthquakes happen/earthquake safety/tsunamis/atmosphere/air and ocean currents/cycles/global warming
24	world climates/rainforests/tropic grasslands/monsoons/tropic deserts/mediterranean climate/temperate/polar
25	mountains/changing climate/weather/water and clouds/thunderstorms/windstorms/floods and droughts/freeze and boil

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**Week Subject**

26	strange weather/forecasts/plants/animals/ecosystems/people and ecosystems/population/farming
27	farm methods/soil/care for soil/layers of soil/weathering/erosion/rivers/river erosion/use of rivers
28	water underground/glaciers/sea edge/seas and oceans/use of oceans/map keys/general science information
29	origin of life/spontaneous generation/acquired characteristics
30	natural selection/mutations/whale origins/odds
31	similarities (homology)/parsimony/fossil record/Darwin
32	fossil record (invertebrate/fish/bats)/Cambrian Explosion
33	fossil record (pinnipeds/flying reptiles/dinosaurs)/evolution of whale controversy
34	fossil record (birds/Archaeopteryx)
35	fossil record (birds/feathered dinosaurs)
36	fossil record (flowering plants)/DNA formation/protein formation/amino acid formation/evolution controversy