

MEL VR Science Simulations Lesson List

Chemistry

Atoms

Atoms in solids
Atoms in gases
Atom structure
Electron orbitals
Isotopes
Orbital names
Electron configuration
Atom size
Ions
Oxygen atom (lab)
Carbon atom (lab)
Carbon 14 isotope (lab)
Sodium atom (lab)
Nitrogen atom (lab)
Neon atom (lab)
Make your atom (lab)

Periodic Table

Periodic table
Periodic table box
Atomic mass
Atom size trends
Periodic Table (lab)

Molecules

Molecules
Molecular representation
Molecular formula (lab)
Make methane molecule (lab)
Make carbonic acid molecule (lab)
Make dichloroethane molecule (lab)
Make a molecule

Isomerism

Structural isomerism
Cis-trans isomerism
Optical isomerism
Isomers or not (lab)
Optical isomerism (lab)
Build isomers (lab)

Substances

Dive into substances
Dive into soda
Dive into aspirin
Dive into aluminum
Dive into ascorbic acid
Dive into soap
Dive into propane
Dive into nitrous oxide
Dive into urotropine
Dive into neon
Dive into silver bromide
Dive into citric acid
Dive into corundum
Dive into menthol
Dive into vanillin
Dive into caffeine
Dive into tungsten carbide
Dive into phenolphthalein
Dive into calcite
Dive into diamond
Dive into graphite
Dive into salt

Physics

Electrostatics

Electric charge
Electric forces
Electric field
Dipoles
Electric sandbox (lab)

Temperature

Heating of gas and solid
Temperature and kinetic energy
Thermal conductivity
Speed distribution vs Temperature
Speed distribution vs Molecular mass
Thermal conductivity (lab)

Gas Laws

Avogadro's Principle
Boyle's Law
Charles's Law
Dalton's Law
Gay-Lussac's Law