

Lesson Glossary

Adhesion

- The attraction of molecules of one kind for molecules of another (different) kind; ESSENTIALLY: water likes to stick to other things

Air Diffusion

- Process resulting from random motion of molecules by which there is a net flow of matter from a region of high concentration to a region of low concentration

Capillary Action

- The movement of water within the spaces of porous material // the ascension (upwards travel) of liquids through tubes/cylinders/roots/stems

Capillary Apparatus

- Referring to structure/grid students built holding capillary tubes



Cohesion

- The attraction of molecules for other molecules of the same kind; ESSENTIALLY: water likes to stick to itself

Growth Substrate // VEGGIE

- The surface of material from which an organism grows or obtain its nourishment (food) // VEGGIE: plant growth system developed and used by NASA in outer space environments

Microgravity

- The condition in which people or objects appear to be weightless



Newton's Second Law of Motion

- $F = ma$ // explains how force can change the acceleration of the object and how the acceleration and mass of the same object are related



Parabolas

- Symmetrical open plane curve movement, essentially the path of a projectile under the influence of gravity

Parabolic Plane // Parabolic Flight



- Aircraft that produces gravity-free conditions in upward and downward flight patterns
- Flights that produce gravity-free conditions in an aircraft, alternating upward and downward arcs interspersed with level flights

Perlite

- volcanic glass that has a relatively high water content, typically formed by the hydration of obsidian

Regolith Simulants // Lunar Regolith Simulant // Mars Regolith Simulant



- Terrestrial (of the earth) material synthesized in order to approximate/experiment with the chemical properties of lunar (moon) and martian (mars) soil

Reservoir

- A place or cavity for fluid storage, in this case a small piece holding the water we use while observing how well each simulant uptakes

Sub-Orbital Flight

- A spaceflight in which spacecraft reaches outer space, but its trajectory intersects the surface of the gravitating body from which it was launched (not reaching escape velocity/not completing orbital revolution)

Surfactant

- A substance which tends to reduce surface tension of a liquid in which it is dissolved

