

Anti-Gravity Effect of Liquids

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"Anti-gravity" is often used to refer to devices that look as if they reverse gravity even though they operate through other means. It is also a recurring concept in science fiction, particularly in the context of spacecraft propulsion. In this picture, a shot was created with zero gravity greens arrangement, dynamic splashes, and fun atmosphere!

All still life items were placed on a piece of wood and glued to a background. Then, the entire background with glued items was set upside down. It is vital to make sure that all construction is steady and still. Some water was poured onto the scene, created a splash, and a sequence of shots were taken. At post-processing, the image was turned on 180 degrees again. That created an illusion of water drops flying up.

These drops are small column of liquid, bounded completely by free surfaces. When a drop initially hits the items on the background, it quickly closes back up on the surface. Subsequently, it develops a large jet that falls from the center of the drop impact zone creating a pendant drop. The pendant drop is a drop suspended from a bulk liquid. The shape of the drop results from the relationship between the surface tension and gravity. The surface tension or interfacial tension can be calculated from the shadow image of a pendant drop using drop shape analysis.

