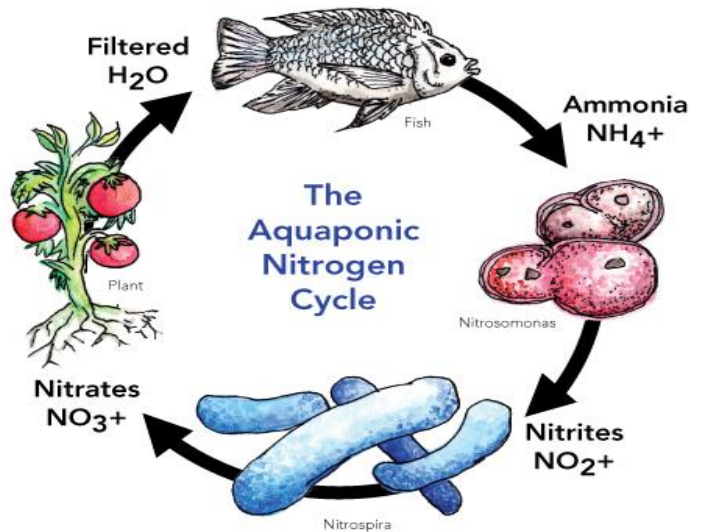


AQUAPONICS

Aquaponics merges two farming technologies – aquaculture and hydroponics. Aquaculture is the farming of fish, crustaceans, mollusks and aquatic plants. Hydroponics is growing plants only in water, not soil. Aquaponics is a symbiotic relationship, where fish waste ammonia is converted by bacteria into nitrites and then into nitrates. The plants absorb the nitrates as fertilizer, and clean water is pumped back to the fish.

Aquaponic systems can be setup as homemade or store-bought kits. System sizes can range from small to large scale. The number of fish must be balanced to the amount of growing surface area for proper bio-filtration. Keep the water well oxygenated by pumping all the water volume through the gravel bed at least once per hour. All aquaponics systems require the following key components:



- Fish “tank” with Aeration
- Pump & Water Lines
- Plants
- Light source
- Plant Container(s) with Growing Medium, i.e. gravel or charcoal, to act as Bio-filter
- Fish - small scale goldfish or larger scale koi, tilapia, catfish, etc.

