

## Something fishy in PA

### Objective(s):

- ☀ Students will be able to define aquaculture
- ☀ Students will be able to identify and describe the parts of the aquaculture system(fish, water, plants, ect)
- ☀ Students will be able to analyze and describe the functions and the interactions of subsystems of an aquaculture operation and how they affect each other.

### Materials:

Teacher supplied information on aquaculture in PA, aquariums and supplies to set them up, fish, water quality monitoring kits or probes for computers

### Procedures:

1. Students use teacher supplied materials to research and learn about aquaculture. Results of the research are then discussed in teacher lead activity. During discussion the idea of a system and subsystem will be introduced. The idea of cycles will also be introduced using ammonia and the nitrogen cycle.
2. Students will set up aquariums and monitor the changes to the water quality over time using water quality test kits and computer probes.
3. Students graph there results and then explain why introduction of too many fish to a new tank can cause the collapse of the entire tank of fish.

### Follow-up activities

1. Observe and report on aquaculture products found during shopping trip to supermarket with parents.