**Lesson:** AMD Formation Venn Diagram

**Content Area:** Ecology

**Grade:** 6-12

**Standards:**

* **S11.B.3.1.5**
* **S11.B.3.2.2**
* **S11.A.1.1.1**
* **S11.A.1.1.3**
* **S11.D.1.2.2**

**Overview:**

1. Students will be constructing a Venn diagram to compare and contrast a clean water sample and an AMD impaired water sample

**Resources:**

* Information from Cold water ecology lesson
* Information found on internet

**Materials**

* Data from previous lessons
* Plain white paper

**Objective:**

* Use information gained from hock kit water testing and knowledge from recent lessons to compare and contrast a healthy stream with AMD impaired water.

**Set-Up:**

* Use data gathered from the water quality testing for a clean stream.
* Allow students to do the same test on an AMD water sample, or home made sample

**Introduction:**

1. Students will be creating a Venn diagram to display the similarities and differences of a clean water sample vs. an impaired water sample.

**Procedure**

1. Have students create a Venn diagram comparing the differences and similarities of a healthy water sample and AMD water.
2. Things such as pH, Alkalinity, dissolved metal content should be used.

**Closure:**

1. Ask students if they were surprised by any of their findings when constructing their Venn Diagram

**Evaluation**

* Organizing thoughts into an readable chart
* Comparing and contrasting

**Extension/Demonstration:**

* Giving each student a different pH is a great way for them to compare with the class and see the differences that pH can cause with involved species.