**Gradient Boosting Machine:**

Classes – 4

learning\_rate = 1

n\_estimators = 950

max\_depth = 1

**Math**:

Cross Validation Mean - .525

Cross Validation Error - .037

Train Score – 1.0

Test Score - .491

**English:**

Cross Validation Mean - .585

Cross Validation Error - .100 (.099)

Train Score – 1.0

Test Score - .679

**Biology:**

Cross Validation Mean - .438

Cross Validation Error - .048

Train Score – 1

Test Score - .585

**Gradient Boosting Machine:**

Classes - 6

learning\_rate = 1

n\_estimators = 950

max\_depth = 1

**Math:**

Cross Validation Mean - .334

Cross Validation Error – .023

Train Score – 1

Test Score - .368

**English:**

Cross Validation Mean - .480

Cross Validation Error – .061

Train Score – .986

Test Score - .585

**Biology:**

Cross Validation Mean - .372

Cross Validation Error – .021

Train Score – 1

Test Score - .443

**Gradient Boosting Machine:**

Classes - 5

learning\_rate = 1

n\_estimators = 950

max\_depth = 1

**Math:**

Cross Validation Mean - .516

Cross Validation Error – .06 (.059)

Train Score – .753

Test Score - .481

**English:**

Cross Validation Mean - .509

Cross Validation Error – .053 (.0526)

Train Score – 1

Test Score - .604

**Biology:**

Cross Validation Mean - .427

Cross Validation Error – .083

Train Score – .938

Test Score - .538 (.5377)