**Lab 3**  
1. The baud rate is fairly close to the programmed rate, but if we would have used PORTB, it probably would have been more accurate.

Code for part 1  
char Output[3];  
char LongString[] = "Arduino serial test";  
int Number = 0;  
int Alpha = 65;  
unsigned long oldMillis = 0;  
int Incoming;  
const long interval = 500;  
void setup() {  
// Sets up the Baud rate  
Serial.begin(9600);  
Serial.available();  
}  
void loop() {  
// Timer that loops through serial print  
unsigned long currentMillis = millis();  
if(currentMillis - oldMillis >= interval) {  
oldMillis = currentMillis;  
for(Number=0; Number< 11; ++Number){ // only part of the ASCII chart, change to suit  
delay (500);  
// print it out in many formats:  
Serial.write(Alpha);  
Serial.print(Number); } // print as an ASCII-encoded decimal - same as "DEC"  
Alpha++;  
if (Alpha == 91) { // you could also use if (Alpha == '~') {  
// This loop loops forever and does nothing  
Alpha = 65;  
} }  
Incoming = Serial.read();  
}

Code for part 2  
char Output[3];  
char LongString[] = "Arduino serial test";  
int Number = 0;  
int Alpha = 65;  
unsigned long oldMillis = 0;  
int Incoming;  
const long interval = 500;  
void setup() {  
// Sets up the Baud rate  
Serial.begin(9600);  
Serial.available();  
for (;;) {  
loop();  
if (serialEventRun) serialEventRun();  
}  
void loop() {  
// Timer that loops through serial print  
unsigned long currentMillis = millis();  
if(currentMillis - oldMillis >= interval) {  
oldMillis = currentMillis;  
for(Number=0; Number< 11; ++Number){ // only part of the ASCII chart, change to suit  
delay (500);  
// print it out in many formats:  
Serial.write(Alpha);  
Serial.print(Number); } // print as an ASCII-encoded decimal - same as "DEC"  
Alpha++;  
if (Alpha == 91) { // you could also use if (Alpha == '~') {  
// This loop loops forever and does nothing  
Alpha = 65;  
} }  
Incoming = Serial.read();  
}