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();
}
```