Name:_____ Date:_____ Period:__
Forensic Science – Mr. DeRycke

FUNDAMENTALS OF BALLISTICS

1. Ballistics deals with what technical problem?

2. What are the different methods of delivering ammunition to a target?

   A.

   B.

   C.

   D.

   E.

3. What do the three types of ballistics deal with?

   I. Interior -

   II. Exterior -

   III. Terminal -

4. What causes the bullet to move forward down the barrel?

5. What do we call the force that moves to the left against the gun? _____

6. What is the chemical name of the “powder” used to propell most bullets & rockets?

7. How do small powder grains burn differently than large powder grains?

   Small Grains:

   Large Grains:

8. Complete the chart below to show how the three types of grains differ.

GRAIN SIZE	NUMBER OF HOLES	GRAIN NAME	BURN TYPE	PRESSURE TYPE
Large Grain				
Medium Grain				
Small Grain				

9. What type of firearm is each type of grain best suited for?

GRAIN TYPE	FIREARM TYPE
Progressive Grain	
Degressive Grain	
Neutral Grain	

10. What could happen if a small degressive grain is used in a long barrelled gun?

11. What would happen to a cannonball if we could fire it with no effect from outside forces?

12. What outside forces do affect the projectile?

13. How can we overcome air resistance?

A.

B.

C.

14. How do we get the projectile to spin?

I.

II.

15. What is the special term we use for “air resistance”? _____

16. Complete the table below to show how we get our desired results for terminal ballistics.

AMOUNT OF EXPLOSIVE	TYPE OF EXPLOSIVE	TYPE OF PROJECTILE	EFFECT ON TARGET
		Blast	
		Penetrating	
		Fragmentation	
		Incendiary	

17. Explain how each type of fuse works.

Time Fuses:

Proximity Fuses:

18. What are the non-firing elements that need to be considered by the terminal ballistician?

Ammunition must be:

A.

B.

C.

D.