1. Fill in the blanks with the given words: *Ray, Angle of incidence, Normal, Reflected Ray, Angle of reflection, Reflection, Virtual image, Incident ray, Plane mirror, Plane, Medium*

	– change in direction of a wave when it reaches a surface and bounces off that surface
	– substance through which light travels
	– a straight line with an arrowhead that shows the direction in which light waves are travelling
	– a ray of light coming toward a surface
	– measured between the incident ray and a perpendicular line drawn from the point of contact of the incident ray at the surface
	– perpendicular line to the boundary or reflective surface
	– a ray of light extending from a reflective surface
	– measured between the reflected ray and the normal
	- the incident ray, normal, and reflected ray all lie on the same flat surface
	– a mirror with a flat, reflective surface
	– an image formed by rays that appear to be coming from a certain position, but not actually coming from this position – Image does not form a visible projection on a screen

2. Why does writing appear to be backward in the mirror?

Things to remember:

- An image in a plane mirror is the same size as the object
- The same distance from the mirror as the object
- The same orientation as the object
- It is also a virtual image

3. Draw the reflected image on the other side of the mirror using the given shape and the location of the eye. (use a pencil, ruler and protractor please). Use all three corners of the triangle (A,B,C) to create your image, show your incident, reflected, and extended lines (lightly). To check your answer you can fold the paper along the blue line (mirror) and your reflection should be on top of the original (hold it up to a window to see). This is a precision and patience task as much as a physics question. You need a sharp pencil, and remember, small angle differences make for large errors the farther you get from the source. Good luck.