

## Lawrence C. Tobias

### Lab - Research a Hardware Upgrade

#### Introduction

Use the Internet, a newspaper, or a local store to gather information about hardware components. Your customer's computer currently has one module of 2 GB of RAM, a 500 GB hard disk drive, and a PCIe video adapter card with 256 MB of RAM. Your customer wants to be able to play advanced video games.

#### Instructions

##### Step 1: Research memory options.

Shop around, and in the table below list the brand, model number, features, and cost for two different 8 GB modules of DDR3.

Brand and Model Number	Features	Cost
<i>Corsair CMZ32GX3M4X1600C10</i>	<i>8GB DDR3 RAM 1600 MHz</i>	<b>P489</b>
<i>Kingston Hyper Fury</i>	<i>8GB 1600Mhz</i>	<b>P550</b>

Question:

Based on your research, which RAM would you select? Be prepared to discuss your decisions regarding the RAM you select.

**Type your answers here.**

Based on my research I would choose the Kingston Hyper Fury because it's much faster and it is a trusted brand. Knowing that Kingston is one of the best in the market.

**Step 2: Research hard disk drive options.**

Shop around, and in the table below list the brand, model number, features, and cost for a 3 TB 7200 rpm SATA 3 hard disk drive and a 500GB or 1TB solid state drive (SSD).

Brand and Model Number	Features	Cost
Seagate/ Seagate ST3000NM0033	3T Hard Disk 7200 to 128M Cache	<b>₱7,959.30</b>
SAMSUNG 9100 PRO 1TB NVMe™ M.2 Solid State Drive	<ul style="list-style-type: none"> <li>• Supercharge your workflow and gaming with PCIe® 5.0. Blazing fast speeds and next-gen power for your most demanding tasks.</li> <li>• Speed past productivity limits. With sequential read/write speeds up to 14,800/13,400 MB/s<sup>3</sup>, ultra-fast processing powers AI apps, massive games, and high-performance tasks with ease.</li> <li>• From laptops to desktop PCs, experience blazing PCIe® 5.0 speeds and up to 8TB of storage for all your tasks.</li> <li>• The 9100 PRO SSD fuels seamless AI content creation, gaming, and more with random read/write speeds of up to 2,200K/2,600K IOPS.</li> <li>• More power, less heat. Smart efficiency and cooling keep you in the fast lane.</li> </ul>	<b>₱9,750.00</b>

Question:

Based on your research, which hard disk drive would you select? Be prepared to discuss your decisions regarding the hard disk drive you select.

**Type your answers here.**

Based on my research I would choose the SAMSUNG 9100 PRO 1TB NVMe™ M.2 Solid State Drive because of its features and quality.

**Step 1: Research video adapter card options.**

Shop around, and in the table below list the brand, model number, features, and cost for two different PCIe video adapter cards with at least 1 GB of RAM.

Brand and Model Number	Features	Cost
Vktech GT610	Graphics Video Card 810MHZ DDR3 1GB Gaming Video Card HD VGA DVI	<b>₱1,116.00</b>
Moon Pomelo Gaming Graphics Card Video Card	1GB PCIe 2.0 Single Cooling Fan GT610 HDMI/VGA/DVI Interface Compact Computer Accessories	<b>₱1,367.12</b>

Question:

Based on your research, which video adapter card would you select? Be prepared to discuss your decisions regarding the video adapter card you select.

***Type your answers here.***

Based on my research I would select the *Vktech GT610* because it's more affordable. I personally think that this model/brand has more to offer quality and performance wise.