

11.3.7 Worksheet: Research Computer Components

Print and complete this activity.

In this activity, you will use the Internet, a newspaper, or a local store to gather information about the components you will need to upgrade your customer's computer. Be prepared to discuss your selections.

1. Your customer already owns the case described in the table below. You will not need to research a new case.

Brand and Model Number	Features	Cost
Cooler Master CAC-T05-UW	ATX Mid Tower ATX, Micro ATX Compatible form factor 5 X External 5.25" drive bays 1 X External 3.5" drive bay 4 X Internal 5.25" drive bays 7 expansion slots USB, Firewire, Audio front ports	

2. Research a **power supply** that is compatible with the components that your customer owns. The new component must have improved performance or additional capabilities. Enter the specifications in the table below.

Brand and Model Number	Features	Cost
Antec SP-450	450 Watt Dual +12V rails > 70% Efficiency ATX12V form factor	\$60.99

3. Research a **motherboard** that is compatible with the components that your customer owns. The new component must have improved performance or additional capabilities. Enter the specifications in the table below.

Brand and Model Number	Features	Cost
GIGABYTE GA-965P-DS3	LGA 775 DDR2 800 PCI Express x16 SATA 3.0Gb/s interface 1.8V-2.4V RAM voltage 1066/800/533MHz Front Side Bus 4 Memory Slots Dual Channel Memory Supported 1XATA100 connector RAID 0/1 4X USB 2.0 ATX Form Factor	

4. Research a **CPU** that is compatible with the components that your customer owns. The new component must have improved performance or additional capabilities. Enter the specifications in the table below.

Brand and Model Number	Features	Cost
Intel Core 2 Duo E6300 BX80557E6300	LGA 775 1.86GHz Operating Frequency 1066MHz Front Side Bus 2M shared L2 Cache 64 bit supported Conroe Core	\$183.00

5. Research a **heat sink/fan assembly** that is compatible with the components that your customer owns. The new component must have improved performance or additional capabilities. Enter the specifications in the table below.

Brand and Model Number	Features	Cost
Intel Stock heat sink/fan	LGA 775 80mm fan 2 pin power Under recommended socket weight	Included with CPU

6. Research **RAM** that is compatible with the components that your customer owns. The new component must have improved performance or additional capabilities. Enter the specifications in the table below.

Brand and Model Number	Features	Cost
Patriot PDC22G6400LLK	240-Pin DDR2 SDRAM DDR2 800 (PC2 6400) Cas Latency 4 Timing 4-4-4-12 Voltage 2.2V	\$194.99

7. Research a **hard disk drive** that is compatible with the components that your customer owns. The new component must have improved performance or additional capabilities. Enter the specifications in the table below.

Brand and Model Number	Features	Cost
Western Digital WD400BB	40 GB 7200 RPM 2 MB Cache	\$37.99

8. Research a video adapter card that is compatible with the components that your customer owns. The new component must have improved performance or additional capabilities. Enter the specifications in the table below.

Brand and Model Number	Features	Cost
XFX PVT71PUDD3	PCI Express X16 600 MHz Core clock 256 MB GDDR3 1600 MHz Memory clock 256-bit memory interface	\$189.99

1. List three components that must have the same or compatible form factor.
2. List three components that must conform to the same socket type.
3. List two components that must utilize the same front side bus speed.
4. List three considerations when you choose memory.
5. What component must be compatible with every other component of the computer?
6. What determines compatibility between a motherboard and a video card?