Exploring Computing: Computer Dissection

GOAL: As a team, discover the parts of a computer and how they are connected. Take your time to investigate and have fun sharing your findings.

First, form your team:

Among the people at your table, identify a person for each of these roles:
- **1 Leader**: to guide the team and make sure you <u>follow the instructions below</u>.
- **1 or 2 electricians:** to take apart the computer and <u>keep track of all the screws removed</u>.
- **1 Scribe:** to jot down notes and observations as you dissect the computer. <u>First thing the Scribe will do is write down the names of the team members and their role for today.</u>

Computer Dissection Instructions:

1) Always keep safety in mind. There are sharp edges on the computer parts, so please act carefully and do NOT play or act irresponsibly with the tools or computer parts.

WARNING: Do Not attempting to plug in any of our old dissection computers – these are unsafe to apply power and could result in electrocution. If I see anyone trying to do this, they will stop participating and receive a zero (0) points for today. Any other unsafe actions may cause similar point loss.

2) Open up the computer case by unscrewing it. **Share the tools and take your time, this is not a race.**

3) Attempt to identify and then remove the six key computer components from the Computer:
- if you appear to be missing something in your computer, talk to Mr. Bergquist
- If something is too difficult to remove, talk to fellow classmates for ideas and then speak with Mr. Bergquist for guidance.

4) As you remove the components, try to determine how they are interconnected via the cables, wires, and board traces (lines). Make a quick sketch of how you think the six items are all connected.

5) Lay out all the Computer components nicely on the table and create a card with each one's name, placing it next to the item. Take your time to make this a professional looking display.

6) After you have all your components labeled and your drawing of how you think they are interconnected, see Mr. Bergquist to review your dissection.

7) Use the Blue Tape to illustrate how the components are interconnected, and have a photo taken of your display. Share your display with others around you.

8) Now carefully put the computer back together, piece by piece, replacing as many screws and parts as you can.

9) When you are done, get your team's assignment checked off.

The Six key Computer Components:
- Motherboard
- CPU
- RAM
- Hard Drive
- Video Card
- Power Supply