

“Life in a Very Cool Lab”

Student Worksheet



Instructions: As your teacher reads the article titled “Life in a Very Cool Lab,” Identify the “Smart” home technologies described by category. Then answer the questions below.

Audio & Video Entertainment:

Environment Control/Energy Management:

Lighting/Window Treatments:

Security & Access Control:

Voice & Data Communication:

Other:

Questions:

- 1) Where does the use of information technology come in?
- 2) What are the risks of using home automation technology?

“Life in a Very Cool Lab”

Student Worksheet - Key



Instructions: As your teacher reads the article titled “Life in a Very Cool Lab,” Identify the “Smart” home technologies described by category. Then answer the questions below.

Audio & Video Entertainment: 12 Audio Zones. Digital audio files controlled via a web browser and streamed from a central server that can played anywhere in the house and from CD, DVD and MP3 format. Touch panels, THX Surround-sound, etc. Fan to cool TV. Home theater that has lights dims when the audio/video system cues up and pauses when the phone rings. Guests can also pick their own music to play when they enter different rooms. Etc.

Environment Control/Energy Management: 14 Environmental Zones and 128 Motion, temperature and moisture sensors. Gas fire place and skylights that react to the weather, occupancy sensors and input from the weather station. Sprinkler system tied to moisture sensors that turn off if motion is detected. Fan to dry fire wood. Heating and cooling tied to temperature sensors and the weather station. Sensors also take into consideration the number of room occupants and adjusts the temperature cooler. Etc.

Lighting/Window Treatments: 100+ lighting loads. Lighting levels automatically adjusted based upon input from the sun sensor and occupancy sensors. Automatic lighting at night to bathrooms. Automatic dimming and lighting based upon weather, occupancy and appliance usage. Etc.

Security & Access Control: 16 Security Zones. Security cameras alert the occupants of someone approaching the home. The guest can be viewed via any display in the home or via the web. The system is able to detect who is home and turn on the news etc. depending on the set up. Etc.

Voice & Data Communication: All activities controlled via SYS through home network. Activities, appliances etc. also controlled via the web.

Other:

Questions:

- 1) Where does the use of information technology come in? **Everything is controlled through the use of computers connected to the Internet and the SYS network.**
- 2) What are the risks of using home automation technology? **Power outages, user dependancy, and possibly privacy if controlled by an outside entity to name a few.**