

## Technology and Society

### Supplemental Lesson Ideas

Class discussions help students consider how technology is already affecting their lives and allowing them to accomplish tasks. Handouts and additional readings help students consider how technology has shaped society in broad terms and also affected the lives of people they know. Students evaluate a piece of science fiction to consider whether the author or director was making predictions about technologies to come.

- 1. Ask students to name some technologies that have had a major impact on our society.**  
Discuss these technologies in terms of their own lives. Ask students to consider how they would accomplish the same tasks without the technology they have named.
- 2. Ask students to help you create a list of the technologies illustrated in this segment.**  
Have them rank the items in terms of personal preference. Have them rank the items in terms of their importance to the world. Discuss the differences in their ranking of the items.
- 3. Give students copies of Inventions That Have Changed the World.**  
When students have completed the handout, discuss their answers. Examine how these historical inventions affected the work and play of people of different periods.
- 4. If you did not assign students the handout The Miracle of the Microprocessor while doing the Microprocessor unit, consider doing so now.**  
The handout does an exceptional job of describing why the invention of the microprocessor has been so important and showing the impact it has had and will continue to have on our society.
- 5. Assign the handout These Are the Good Old Days.**  
Then have them ask their parents or grandparents what life was like before computers and microprocessors. Have them write a report or give an oral presentation in class.
- 6. Discuss the job skills that are now being expected of workers.**  
Have them consider how many of these skills they are currently learning or practicing in their school assignments.
- 7. If you did not assign students the handout Making of a Silicon Chip while doing the Microprocessor section, consider using it now.**  
The handout does a great job of describing the complex process by which chips are made.
- 8. Assign the handout Beyond School.**  
You may want to use as a guest lecturer someone from a local high-tech company. Or, you may want to arrange a field trip so that your class can visit such a company. There they will see ordinary people routinely working in high-tech environments.
- 9. Assign students the handout To Infinity and Beyond.**  
Have them read it and then discuss the ramifications of Moore's Law. Compare it with things they can relate to—such as if the size of their family doubled every year or if the number of students in their school doubled every year.
- 10. Assign students the handout Chips and More Chips.**  
Discuss the activities as a group.
- 11. Ask your students to bring to class copies of advertisements for futuristic products and services.**  
They can check in magazines, catalogs, and newspapers. Develop a bulletin board display of these advertisements and articles. Have them discuss some of the items that are displayed.

12. **Have students complete the Ubiquitous Computing handout.**

Have your students discuss their answers to the handout and try to give them insight into the perspective that may actually see computing advance until the actual machine "disappears into the woodwork—literally—and the microprocessors are embedded in the walls, desks, light sockets, doorknobs and practically every other square foot of your workplace and home" (Weiser, Ubiquitous Computing, Smithsonian, 1994).

13. **There are many choices of science-fiction stories and movies that will interest your students.**

Many of these use a future world as the setting. Have students either read or watch something that fits into this category. Then have them identify some of the things the author used in the story that could be thought of as predictions. Have them share their reactions to these predictions. How likely do they think it is that these predictions will come true?