Science: Our Common Heritage

1. General Interest

Frontiers of the natural and social sciences . . . very large-scale integrated circuits.

2. *Science* Centennial

Centennial of *Science* . . . communicating science . . . the next decade . . . world of tomorrow.

3. Physics, Chemistry, Astronomy

Petrochemicals . . . stars . . . first billion years . . . planetary spaceprobes . . . archeoastronomy . . . physics of everyday experience . . . industrial applications.

4. Geology and Climate

San Andreas Fault . . . early man sites . . . CO_2-induced climate change . . . climate and food supplies . . . oceans from space . . . marine geosciences.

5. Engineering and Technology

Factory of future . . . space policy in 1980's . . . human reliability . . . macroengineering . . . industrial innovation . . . soft and hard technology . . . personal transportation.

6. Energy Development

Energy in the 1980's . . . chemical solar energy conversion . . . solar energy development . . . fusion energy . . . nuclear reactor safety . . . uranium resources . . . geothermal energy.

7. Energy and Environment

Energy, environment, economics . . . public attitudes toward conservation and energy . . . tragedy of commons . . . decentralized, renewable systems.

8. Environmental and Ecological Science

Pesticide usage . . . environmental toxicology . . . regulations and new chemicals . . . development and wildlife management . . . man and biosphere . . . Namib desert . . . human impacts on the desert.

9. Biological Science

Surfaces . . . organelle assembly . . . molecular biology and agriculture . . . poikilothermic animals . . . gene resource conservation . . . whales . . . biological time . . . chemistry of vision . . . bioelectricity.

10. Mathematical Methods in Biomedicine

Computers in plant disease and pest management . . . mathematics in biology . . . biological geometry . . . stereology . . . computers and drug design.

11. Medical Science

Endorphins . . . atherosclerosis . . . hypnotic responsiveness . . . biofeedback . . . psychoanalytic self-psychology . . . psychotherapy . . . immune regulation and oral disease . . . behavioral medicine . . . craniofacial biology . . . embryology.

12. Public Health and Health Care

International Year of the Child . . . health status . . . health policies in 1980's . . . reproductive technologies: ethical issues . . . radiation biology . . . microwaves in biomedicine . . . Marshall Islanders 25 years after exposure . . . preventive dentistry.

13. Economic and Political Science

Short-term decision-making . . . large-scale energy models . . . ending nuclear arms race . . . agrarian systems, agricultural transfer, and politics of land use . . . inflation . . . graphics.

14. Sociology and Anthropology

Cultural complexity . . . basic and applied anthropology . . . violence in America . . . anthropology of medicine . . . traditional medicine and science . . . 1980 census . . . California as advanced technology . . . food-collecting societies.

15. Technology and Development

Technological choice in developing countries . . . bureaucratic organization . . . ideology and religion in Third World . . . development in Latin America . . . UN Conference on Science and Technology . . . international economics.

16. Information, Technology, and Society

Machine intelligence . . . software and know-how . . . communication in the 80's . . . cryptosystems . . . impact assessment . . . risk in technological society . . . telecommunications.

17. History and Philosophy of Science

Pseudosciences . . . ethics . . . political economy of science . . . evolutionary vision . . . systems science . . . technology . . . ecological perspective . . . history and alternative technologies . . . radioastronomy . . . agriculture.

18. Education

Stuttering . . . theory and practice of education . . . social sciences . . . liberal education and natural science . . . national needs assessment . . . precollege science education . . . longitudinal study . . . learning outside of the classroom.

19. Opportunities and Responsibility in Science

Scientists as whistle-blowers . . . rights and responsibilities of scientists and engineers . . . promoting participation of women and minorities . . . handicapped in science . . . employment and advancement.

20. Science, Government, and Research

Science advice and federal policy . . . intergovernmental cooperation . . . nonprofit organizations . . . federal funding and agriculture . . . research and the steady-state university . . . federal policies and R&D . . . Defense Department and science.