

**Science – Principles of Technology**  
**Hartley-Melvin-Sanborn CSD**  
**Grade Level/Course Benchmarks**

Students will:

1. Use technology to perform accurate scientific investigations and communications. (GENERAL)(I & II)
2. Understand how scientific knowledge changes and accumulates over time. (GENERAL)(I & II)
3. Know ways in which science and society interact with one another. (GENERAL)(I & II)
4. Know that different kinds of materials respond differently to electric forces resulting in conductors and insulators.(I) (PHYSICAL)
5. Know that heat energy is due to vibrations of particles and how it is transferred (I) (PHYSICAL)
6. Know the laws of motion are used to calculate precisely the effect of forces on the motion of an object; and the magnitude of the change in motion can be calculated. (I) (PHYSICAL)
7. Relate law of conservation of energy and matter to work, power, potential energy, and simple machines (I &II) (PHYSICAL)
8. Understand wave motion and its properties (I & II) (PHYSICAL)
9. Know that magnetic forces are very closely related to electric forces and is the basis for electric motors, generators and other modern technologies (II) (PHYSICAL)
10. Know what fission and fusion are: nuclear reactions convert a fraction of the mass of interacting particles into energy (II) (PHYSICAL)

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9-12 team Dotty Trost