

Technology (5th – 8th Grade)

Academic Content & Skills Summary

Peru Elementary School District 124

In an effort to communicate clear academic expectations to students, parents and the local community, Peru Elementary School District 124 provides Academic Content and Skills Summaries from preschool through eighth grade in the areas of mathematics, language arts, science, social studies, technology, art, music and physical education.

Following is a simple summary of what our children should know and be able to do at each grade level in the area of Technology. All children can learn, even if not at the same pace or in the same way, and ultimately these general skills and content items are what we will strive to accomplish with the assistance of our parents at home.

5th and 6th Grade (Computer Applications) students will:

- Identify and explain the strategies for the safe and efficient use of computers (e.g. passwords, virus protection software, spam filters, pop up blockers).
- Demonstrate positive social and ethical behaviors when using technology, such as using proper netiquette.
- Use a variety of age-appropriate technologies to communicate and exchange ideas.
- Use age-appropriate keyboarding skills to produce grade level projects.
- Apply digital tools to gather, evaluate, and use information.
- Organize data using tools such as spreadsheets, graphic organizers, and slideshows
- Create original works or responsibly repurpose or remix digital resources into new creations.
- Recognize that the computer relies on sequential steps in order to perform tasks.

A required trimester course in 5th and 6th grade designed to expose students to a variety of technology topics, including keyboarding, Microsoft Office, Coding, Digital Citizenship, Web 2.0 tools, and various presentation programs

7th and 8th Grade (Computer Programming) students will:

- Use a step-by-step process for solving a problem.
- Recognize that the computer relies on sequential steps in order to perform tasks.
- Develop steps to create innovative products using electronic resources.
- Identify, collect, and analyze information in order to solve a problem and explain the steps to find the solution.

A trimester course offered to students to take once during their 7th or 8th grade year. It is designed to teach students fundamental programming concepts and the role of computer science and scientists in today's world.

7th and 8th Grade (STEM) students will:

- Identify and explain the strategies for the safe and efficient use of computers (e.g. passwords, virus protection software, spam filters, popup blockers).
- Demonstrate positive social and ethical behaviors when using technology, such as using proper netiquette.
- Use a design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.
- Use digital tools to plan a design process.
- Develop, test and refine prototypes as part of a design process.
- Exhibit perseverance in order to work with open-ended problems.
- Break problems into component parts, extract key information, and develop models to facilitate problem-solving.
- Contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.

A required trimester course for 7th and 8th grade that consists of a modular curriculum program emphasizing Science, Technology, Engineering, and Math. Each of 13 modules engages students through the use of computer assisted learning. Content is delivered through text, graphics, video segments and hands-on activities.