# i-SAFE SCOPE AND SEQUENCE

## GRADES K – 4

<table>
<thead>
<tr>
<th><strong>Cyber Community Citizenship (Lesson 1)</strong></th>
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<td><strong>Grade K</strong></td>
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</table>
| **Grade 1** | The i-SAFE character, i-Buddy, is used to introduce the abstract concept of a community on the Internet, and to reinforce that students should have adult assistance when using the Internet. The following is covered:  
- Community is defined as the area where we live, with places where we know real people.  
- Students identify how people get from place to place in the real community.  
- Cyberspace is described as a community that contains places to visit, just like in the real community. It is called the cyber community.  
- Introduction of the term “Website” to describe places in the Cyber community.  
- Students identify how kids get around in Cyberspace as (1) by using the Internet, and (2) with adult assistance.  
- A short story about I-Buddy prompts students to create a rule to reinforce the idea that if they get lost on the Internet, they should get help from an adult.  
- A citizen is described as a member of a community.  
- The term “cyber citizen” is used to describe a person who is in the Cyber community (using the Internet).  
- The similarity between community rules and Cyber community rules is identified.  
- Parents are identified as the primary educators who make rules to keep their children safe when in the physical community and when using computers and the Internet.  
- Students describe being good cyber citizens as using adult assistance when on the computer.  
- The saying “Cyber Smart is Cyber Safe” is used to reinforce the lesson concepts. |
| **Grade 2** | Grade 1 concepts are introduced and built upon by introducing the following:  
- Community is also identified as a group of people who like the same things.  
- A community has rules to help keep its citizens safe. A good citizen is one who knows and follows the rules of a community.  
- An activity introduces the concept that the following community rules can also apply to the Internet:  
  o Do not lie  
  o Do not cheat  
  o Do not steal  
  o Do not hurt others  
  o Call an adult if you need help  
- Good citizens are also called responsible citizens.  
- Identification of people in the community who help keep others safe.  
- Community rules/laws are compared to Internet use rules. |
| Grade 3 | Grade 2 concepts are introduced and built upon by introducing the following:  
|         | • Place in communities are identified by addresses.  
|         | • An Internet address is called a URL.  
|         | • Terminology introduction and discussion: appropriate and inappropriate  
|         | • Inappropriate places in the community, and on the Internet, are described as places that are not suitable for kids.  
|         | • Concept introduction: inappropriate equals unsafe.  
|         | • Age-appropriate descriptions of inappropriate websites  
|         | • Concept introduction: inappropriate website can be accessed through e-mail.  
|         | • E-mail is a way people communicate online by sending written letters.  
|         | • Appropriate e-mail is a fun way to communicate with people you know.  
|         | • Even if e-mail is not used very much yet at this age, the important thing to remember is that students should follow the rules for Internet and e-mail use that parents have established.  
|         | • Age-appropriate strategy to get out of inappropriate websites is described as:  
|         |   o Click the ‘X’ (close box) in the corner of the web page.  
| Grade 4 | Grade 3 concepts are introduced and built upon by introducing the following:  
|         | • Some types of e-mail are inappropriate e-mails.  
|         | • Inappropriate e-mails are described briefly as threatening or mean e-mails, hoaxes, scams and SPAM.  
|         | • Definitions for inappropriate e-mails are described with age-appropriate terminology.  
|         | • Ways to handle inappropriate e-mail that may be received are described in the following ways:  
|         |   o Don’t open e-mail from people you don’t know.  
|         |   o It’s a good idea to ask for permission from an adult before you open any e-mail.  
|         |   o If an e-mail contains inappropriate materials delete it.  
|         |   o Never reply to SPAM e-mail  
|         | • Concept introduction: inappropriate websites can be fixed so that responsible cyber citizens cannot get out of them very easily.  
|         | • Additional strategies to get out of inappropriate websites are described as:  
|         |   o Click the back arrow  
|         |   o If all else fails, turn off the system completely.  |
# Personal Safety (Lesson 2)

## Grade K

The i-SAFE character, i-Buddy, is used to introduce the abstract concept of safety while online, and to reinforce that students should have adult assistance when using the Internet through the following:
- Review of lesson 1
- Concept introduction: E-mail (example shown)
- Age-appropriately define the term stranger
- Discuss: how rules of the community such as “Do not talk to strangers” help safety.
- The FBI is introduced and defined.
- Concept introduction: People met online may be strangers.

## Grade 1

Grade K concepts are introduced and built upon by introducing the following:
- Different ways to communicate
- Strangers can trick you into believing they are safe.
- Terminology introduction and discussion: uncomfortable, and age-appropriate strategies for uncomfortable situations
- Introduction of the FBI Internet Safety Tips:
  - Never give out personal information
  - Never write someone who has made you feel uncomfortable.
  - Never meet or visit with someone without your parent’s permission.
  - Tell an adult if you read anything on the Internet that makes you feel uncomfortable.
  - People online may not be who they say they are.
- Strategy reinforced: students should have adult assistance when using the Internet.

## Grade 2

Grade 1 concepts are introduced and built upon by introducing the following:
- The importance of rules and laws
- Expansion of FBI Tips description
- Strategy reinforced: students should have adult assistance when using the Internet

## Grade 3

Grade 2 concepts are briefly introduced and built upon by introducing the following:
- Discussion of the FBI Internet safety tips
- Concept expansion: definition and discussion of the term trusted adult

## Grade 4

Grade 3 concepts are introduced and built upon by introducing the following:
- Concept introduction: identifying information
- Other forms of cyber communication
  - Instant messaging (Concept of a buddy list is introduced)
  - Chat Rooms
  - Bulletin Boards
- Terminology introduction and discussion: permission
# Cyber Security (Lesson 3)

## Grade K

The i-SAFE character, i-Buddy, is used to introduce the abstract concept of the computer virus, and to reinforce that students should have adult assistance when using the Internet through the following:

- Review of previous lessons
- Concept introduction: computers can get “sick”
- Terminology introduction and discussion: virus
- Compare descriptions of “sick” people and “sick” computers
- Concept introduction: computer viruses can be found in e-mails
- Age-appropriate prevention technique: Do not open emails without permission.

## Grade 1

Grade K concepts are introduced and built upon by introducing the following:

- Terminology introduction and discussion: infected
- Concept introduction: a computer virus is a computer program.

## Grade 2

Grade 1 concepts are introduced and built upon by introducing the following:

- Terminology introduction and discussion: attachment
- Concept introduction: there are laws and consequences governing people who invent viruses.
- Terminology introduction and discussion: prevent, used in conjunction with how to protect the computer from viruses.

## Grade 3

Grade 2 concepts are introduced and built upon by introducing expanding explanations, vocabulary, and age-appropriate computer virus prevention techniques.

## Grade 4

Grade 3 concepts are introduced and built upon by introducing the following:

- Terminology introduction and discussion: e-mail forwards.
- Forwarded email is a red flag for viruses.
- Terminology introduction and discussion: automatically, as it is related to viruses and e-mail.
- Reinforcement of age-appropriate computer virus prevention techniques.
### Intellectual Property (Lesson 4)

**Grade 3**

The i-SAFE character, i-Buddy, is used to introduce the concept of Intellectual Property. Lesson activities:
- Create a comparison of tangible property to Intellectual Property
- Age appropriately define rules for Intellectual Property
- Identify material which qualifies as Intellectual Property
- Create and share guidelines about using Intellectual Property

**Grade 4**

An introduction to the concept of Intellectual Property is used to develop an understanding of how students can use online Intellectual property correctly. Lesson activities:
- Create a comparison of tangible property to Intellectual Property
- Age appropriately define rules for Intellectual Property
- Identify material which qualifies as Intellectual Property
- Discuss guidelines for using Intellectual property correctly
- Incorporates an integrated literacy activity in which students use an Intellectual property example correctly to create a new paragraph

### Cyber Bullying

**Grade 4**

Introduce the concepts of Cyber bullying and kindness online with a focus on Netiquette. Identify courses of action and resources:
- Definitions of cyber bullying and netiquette.
- Tips on prevention
- Resources to report

Student activities:
- E-mail Aptitude activity
- Recipe for kindness – students develop a recipe for kindness
- Recipe posters – Recipes are displayed with illustrations
### Cyber Community Citizenship (Lesson 1)

| Grade 5 | The Internet community is compared to the physical community, highlighting the following similarities:  
• Real people interact  
• Examples of safe/appropriate and unsafe/inappropriate places  
• Strategies for age-appropriate safe travel  
Student activities:  
• Design a map/poster to illustrate safe and unsafe places in both communities.  
• Use a choice of media/venue to share Internet safe travel tips with others. |
| --- | --- |
| Grade 6 | The Internet community is compared to the physical community, with a focus on rules and responsibilities as citizens.  
Student activities:  
• Create a Venn diagram poster to illustrate a comparison of (1) places and (2) citizenship responsibilities, in the physical and cyber communities.  
• Create a Cyber citizenship rule, and use a choice of media/venue to share it with others. |
| Grade 7 | The Internet community is compared to the physical community, with a focus on the following:  
• Who participates  
• How people interact  
• The roles of community leaders  
Student activities:  
• Interview students about their online activities.  
• Interview other community members about their online activities.  
• Use a choice of media/venue to share information about how people use the cyber community in a positive way. |
| Grade 8 | The Internet community is compared to the physical community, with a focus on evaluating the appropriateness of websites considering:  
• Age-group  
• Intended use  
• Reliability of information  
Student activities:  
• Create a Webpage evaluation tool.  
• Evaluate Webpages.  
• Use a choice of media/venue to share information about how to evaluate websites, and how to avoid inappropriate websites. |
## Cyber Security (Lesson 2)

| Grade 5 | Cyber security issues are addressed, focusing on the following issues:  
|         | • E-mail protocol and etiquette  
|         | • Attributes of viruses  
|         | • Consequences of spam, flaming, and viruses  
|         | **Student activities:**  
|         | • Participate in a game to illustrate how viruses spread.  
|         | • Design a brochure to inform about e-mail etiquette and safety.  
|         | • Use a choice of venues to distribute brochures. |

| Grade 6 | An overview of cyber security issues leads into a focus on:  
|         | • Vocabulary associated with e-mail use  
|         | • Attributes of computer viruses  
|         | • Consequences of malicious behavior involved in online communication  
|         | **Student activities:**  
|         | • Develop a top ten list of e-mail rules.  
|         | • Create a slogan to reinforce the necessity of proper e-mail etiquette. |

| Grade 7 | An overview of cyber security leads into a focus on the aspects of cyber bullying:  
|         | • Recognition  
|         | • Consequences  
|         | • Techniques to prevent or discourage  
|         | **Student activities:**  
|         | • Participate in a self-esteem activity.  
|         | • Create a skit or scenario about cyber bullying or computer viruses, which presents a problem and appropriate solution.  
|         | • Use a choice of media/venue to share information about cyber security. |

| Grade 8 | Overview of cyber security issues, with details on specific threats and consequences of:  
|         | • Computer viruses  
|         | • Trojan horses  
|         | • Worms  
|         | • Hacking  
|         | **Student activities:**  
|         | • Complete a KEWL chart (KWLS-type).  
|         | • Complete a topic review crossword puzzle.  
|         | • Develop a way to share information learned about cyber security. |
| Grade 5 | In an age and experience appropriate manner, investigate and identify key concepts associated with responsible and safe Internet choices and behaviors as they pertain to:  
- Providing personal information  
- Screen names and Passwords  
- Online communication methods  
  
  **Student Activities:**  
- Identify safe and unsafe passwords and online IDs.  
- Illustrate cause and effect situations relating to online personal safety.  
- Use a choice of media/venue to inform others about online personal safety. |
|---|---|
| Grade 6 | Build upon concepts introduced in previous grade levels, or use an age-appropriate introduction, to investigate and identify key concepts associated with responsible and safe Internet choices and behaviors as they pertain to:  
- Providing personal information  
- Screen names and Passwords  
- Online communication methods  
  
  **Student Activities:**  
- Participate in a bingo review game.  
- Use a choice of media/venue to inform others about online personal safety. |
| Grade 7 | Build upon concepts introduced in previous grade levels, or use an age-appropriate introduction, to investigate and identify key concepts associated with responsible and safe Internet choices and behaviors as they pertain to:  
- Providing personal information  
- Screen names and Passwords  
- Online communication methods  
  
  **Student Activities:**  
- Choice of online or offline information review game.  
- Use a choice of media/venue to inform others about online personal safety. |
| Grade 8 | Build upon concepts introduced in previous grade levels, or use an age-appropriate introduction, to investigate and identify key concepts associated with responsible and safe Internet choices and behaviors as they pertain to:  
- Providing personal information  
- Screen names and Passwords  
- Online communication methods  
  
  **Student Activities:**  
- Develop a set of Internet safety guidelines, and relate their use or lack of use to a real Internet crime story.  
- Use a choice of media/venue to inform others about online personal safety. |
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<tr>
<th>Grade</th>
<th>Predator Identification (Lesson 4)</th>
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| **Grade 5** | Investigate and identify key concepts associated with responsible and safe online interaction, with a focus on issues associated with Internet predators:  
• Key characteristics  
• Grooming process  
• Proactive techniques to reduce risk  

Student activities provide specific focus for grade level:  
• Participation in the ID Match-up game illustrates how screen names are used.  
• Share Internet safety knowledge with parents/guardians through a survey. |
| **Grade 6** | Investigate and identify key concepts associated with responsible and safe online interaction, with a focus on issues associated with Internet predators:  
• Key characteristics  
• Grooming process  
• Proactive techniques to reduce risk  

Student activities provide specific focus for grade level:  
• Participation in the Information game illustrates how indirect information is obtained.  
• Share Internet safety knowledge with parents/guardians through a survey. |
| **Grade 7** | Investigate and identify key concepts associated with responsible and safe online interaction, with a focus on issues associated with Internet predators:  
• Key characteristics  
• Grooming process  
• Proactive techniques to reduce risk  

Student activities provide specific focus for grade level:  
• The Chat Race game is used to identify how predators in a chat situation obtain information.  
• Share Internet safety knowledge with parents/guardians through a survey. |
| **Grade 8** | Investigate and identify key concepts associated with responsible and safe online interaction, with a focus on issues associated with Internet predators:  
• Key characteristics  
• Grooming process  
• Proactive techniques to reduce risk  

Student activities provide specific focus for grade level:  
• Participation in the ID Match-up game illustrates how screen names are used; including predator example.  
• Share Internet safety knowledge with parents/guardians through a survey. |
## Intellectual Property (Lesson 5)

| Grade 5 | Investigate and identify key concepts associated with responsible use on the Internet, focusing on the following aspects of intellectual property:  
| Attributes and types  
| Definitions of copyright and plagiarism  
| Techniques to avoid IP theft and plagiarism  
| Student activities provide specific focus for grade level:  
| Complete a KEWL chart (KWLS-type).  
| Create original posters to illustrate the concept of intellectual property.  
| Develop a way to share information learned about intellectual property. |

| Grade 6 | Build upon concepts introduced in previous grade levels, or use an age-appropriate introduction, to investigate and identify key concepts associated with responsible use on the Internet, focusing on the following aspects of intellectual property:  
| Attributes and types  
| Definitions of copyright and plagiarism  
| Techniques to avoid intellectual property theft and plagiarism  
| Consequences on intellectual property theft  
| Student activities provide specific focus for grade level:  
| Complete a Persuasion chart.  
| Create activities to promote information about intellectual property rights. |

| Grade 7 | Build upon concepts introduced in previous grade levels, or use an age-appropriate introduction, to investigate and identify key concepts associated with responsible use on the Internet, focusing on the following aspects of intellectual property:  
| Attributes and types  
| Definitions of copyright and plagiarism  
| Techniques to avoid intellectual property theft and plagiarism  
| Consequences on intellectual property theft  
| Copyright rules as they apply to student work  
| Student activities provide specific focus for grade level:  
| Complete a Cause and Effect chart.  
| Create and share poems or jingles to promote information about intellectual property rights. |

| Grade 8 | Build upon concepts introduced in previous grade levels, or use an age-appropriate introduction, to investigate and identify key concepts associated with responsible use on the Internet, focusing on the following aspects of intellectual property:  
| Definitions of copyright and plagiarism  
| Laws governing intellectual property  
| Student activities provide specific focus for grade level:  
| Playact a mock trial.  
| Post, display, or broadcast mock trial and results. |
| Grade 5 | Build upon concepts introduced in previous grade level, or use an age-appropriate introduction to investigate and identify key concepts associated with cyber bullying and netiquette:  
- Attributes and types  
- Expansion of definition  
- Techniques to avoid bullying  

Student activities provide specific focus for grade level:  
- Participate in the Instant Messaging Aptitude activity.  
- Kindness Quilt – Students develop quilt squares on topic of kindness.  
- Kindness Quilt displayed and students pledge to commit three kind acts. |
| Grade 6 | Build upon concepts introduced in previous grade levels, or use an age-appropriate introduction to investigate and identify key concepts associated with cyber bullying and netiquette:  
- Attributes and types  
- Expansion of definitions  
- Background on why. Discuss motivation for both  

Student activities provide specific focus for grade level:  
- Complete a KEWL chart.  
- Participate in the Online Chat Aptitude activity.  
- Create an activity to promote information about cyber bullying. |
| Grade 7 | Build upon concepts introduced in previous grade levels, or use an age-appropriate introduction to identify key concepts associated with cyber bullying:  
- Attributes and types  
- Expansion of definitions  
- Techniques to avoid/report bullying  
- Consequences of cyber bullying  

Student activities provide specific focus for grade level:  
- Participate in the Cyber bullying scenario activity.  
- Create and broadcast PSAs about Cyber bullying. |
| Grade 8 | Build upon concepts introduced in previous grade levels, or use an age-appropriate introduction to identify key concepts associated with cyber bullying:  
- Expansion of definition  
- Introduction of cyber stalking concept  
- Laws governing harassment online  

Student activities provide specific focus for grade level:  
- Read victim stories and write “Dear Abby” type letters.  
- Choose a means to spread message to school – via cable tv, PA, awareness day, etc. |
## Integrated Literacy – Internet Safety Focus

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<th>Grade 5</th>
<th>Review basic concepts about cyber community and cyber citizenship and utilize information to construct an educational story or other language arts activity for students in a younger grade.</th>
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</table>
|         | Student activities provide specific focus for grade level:  
|         |   • Construct an educational story on lesson concepts.  
|         |   • Share original Internet safety stories with younger students.                                                                                                                                   |
| Grade 6 | Review information about e-mail protocol and computer virus prevention and utilize information to construct an educational story or other language arts activity for students in a younger grade. |
|         | Student activities provide specific focus for grade level:  
|         |   • Construct an educational story on lesson concepts.  
|         |   • Share original Internet safety stories with younger students.                                                                                                                                   |
| Grade 7 | Review and reinforce the necessity of using caution when interacting online, including how to deal with mean or bullying interactions, and utilize information to construct an educational story or other language arts activity for students in a younger grade. |
|         | Student activities provide specific focus for grade level:  
|         |   • Construct an educational story on lesson concepts.  
|         |   • Share original Internet safety stories with younger students.                                                                                                                                   |
| Grade 8 | Review and reinforce the necessity of using caution when providing personal information on the Internet and utilize information to construct an educational story or other language arts activity for students in a younger grade. |
|         | Student activities provide specific focus for grade level:  
|         |   • Construct an educational story on lesson concepts.  
|         |   • Share original Internet safety stories with younger students.                                                                                                                                   |

## Homeland Security

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<tr>
<th>Grades 7 - 8</th>
<th>Integrate knowledge and concepts previously learned about hacking, steganography, malicious code (i.e. viruses and worms) with information on cyber terrorism, to identify and comprehend the utilization of the Internet in cyber terrorism and cyber warfare.</th>
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</table>
|              | Student activities:  
|              |   • Review previous lesson concepts.  
|              |   • Participate in a webquest for knowledge about homeland security issues.  
|              |   • Construct guidelines that can be used to combat cyber terrorism by students and others in the community.  
|              |   • Share guidelines through a choice of various media.                                                                                                                                            |
### Grades 9 – 12

#### Library of Activities and Webcasts

| Pre-Webcast Activity: Community | The Internet community is compared to the physical community with a focus on:  
|                               | • Similarities and differences  
|                               | • Appropriate vs. Inappropriate online interactions  
| Student activities: | • Complete a survey concerning Online activity.  
|                    | • Discuss survey in class with peer group.  
|                    | • Engage parents in discussion about Internet safety with a parent survey. |

| Webcast 1: Privacy and the Internet | An Introduction to safety online focusing on:  
|                                  | • Personal Information  
|                                  | • Online Privacy  
|                                  | • Various forms of online communication.  
| Student activities: | • Observe a webcast.  
|                    | • Discuss webcast topics and questions.  
|                    | • Share knowledge with others through the selection of outreach activities. |

| Webcast 2: Cyber Relationships | An investigation of safety in online communication focuses on:  
|                               | • Proactive techniques  
|                               | • How people interact  
|                               | • Refusing requests for information  
|                               | • Reporting suspicious activities  
| Student activities: | • Observe a webcast.  
|                    | • Discuss webcast topics and questions.  
|                    | • Share knowledge with others through the selection of outreach activities. |

| Webcast 3: Intellectual Property | Identify appropriate use of the Internet and intellectual property by covering:  
|                               | • Definition of Property  
|                               | • Definition of Intellectual Property  
|                               | • Related key terminology  
|                               | • Rules, Laws, and Consequences  
| Student activities: | • Observe a webcast.  
|                    | • Discuss webcast topics and questions.  
|                    | • Share knowledge with others through the selection of outreach activities. |
| Webcast 4: Security: Malicious Code | An investigation of Internet security issues focuses on:  
  - Definition of Malicious Code  
  - Definition of Virus  
  - Definition of Worm  
  - Definition of Trojan Horse  
  - Identity Theft  
  - Related key terminology  
  - Rules, Laws, Consequences  
  - A general focus on methods for prevention and how to keep computer secure  
  
  Student activities:  
  - Observe a webcast.  
  - Discuss webcast topics and questions.  
  - Share knowledge with others through the selection of outreach activities. |
|-----------------------------------|-------------------------------------------------------------------------------------------------|
| Webcast 5: Security: Cyber Citizenship | An investigation of Citizenship issues presented by Internet use focuses on:  
  - Hacking and hactivism  
  - Steganography  
  - Potentials of terrorist use of the Internet  
  - Provides information on techniques to protect computers from external threats.  
  - Associated legal consequences  
  
  Student activities:  
  - Observe a webcast.  
  - Discuss webcast topics and questions.  
  - Share knowledge with others through the selection of outreach activities. |
| Webcast 6: Social Issues | Developed around a collection of student-produced videos on Internet social issues, including:  
  - The grooming process  
  - Online identities  
  - Online relationships  
  
  Student activities:  
  - Observe a webcast.  
  - Discuss webcast topics and questions.  
  - Share knowledge with others through the selection of outreach activities. |
| Webcast 7: Social Issue: Pornography | Developed around the winning high school entry in the Student Filmmaker Contest. Presents the problems associated with the ease of access to pornography on the Internet.  
  
  Note: Educators will be cautioned to view the Webcast first and determine whether or not the content is in accordance with school policies. |