Essential Question: What information is appropriate in a digital footprint?

Learning Overview and Objectives

Overview: Students learn that the information they put online leaves a digital footprint or “trail.” This trail can be big or small, helpful or hurtful, depending on how they manage it.

Students follow the digital information trails of two fictional animals. They make observations about the size and content of each trail, and connect these observations by thinking critically about what kinds of information they want to leave behind.

Students will:
- Learn that the information they put online leaves a digital footprint or “trail”
- Explore what information is appropriate to be put online
- Judge the nature of different types of digital footprints by following the information trails of two fictional animals

Materials and Preparation

Materials
- Digital Trail Squares (see end of lesson plan)
- Animal Tracks Student Handout

Preparation
- Cut apart the squares from the Digital Trail Squares (see the end of this lesson plan), keeping the elephant and mouse squares separate. Be prepared to lay out each animal’s “tracks” in different locations in the classroom after the “Introduce” step.
- Make copies of the Animal Tracks Student Handout, one for each group of four

Parent Resources
- Send parents the Privacy and Digital Footprints Parent Tip Sheet

Key Vocabulary
- Trail: A path or track
- Digital Footprint: The information about you on the Internet
- Permanent: There forever
teaching plans

Introduce

TEACH the Key Vocabulary term **trail**.

SHARE with students that you can place information online much like you pin something to a bulletin board.

ASK *What kinds of things are on the bulletin board or walls in our classroom?*

  Sample responses:
  - **Student work**
  - **Photos of students**
  - **Birthday chart**

INVITE students to imagine that all of the information on the walls of their classroom was pinned up on a bulletin board at a local grocery store. Ask them if they would be comfortable with this information being up for everyone to see. (Guide students to think about how some information is better kept for only their eyes or the eyes of people close to them.)

EXPLAIN that there is certain information that might be fine to show anyone. But there is also personal and private information, such as their addresses, birth dates, and photos of their family vacations, which is not meant for most people’s eyes.

Teach 1: Follow the Digital Trail

PLACE the **Follow the Digital Trail Squares** on the ground, face down, in two different trails, keeping Mizzle the Mouse and Electra the Elephant’s trails separate from one another.

SHARE the stories of Mizzle and Electra. These animals decided it would be fun to put some information about themselves online. They went onto [www.wildkingdom.com](http://www.wildkingdom.com) and posted information. The only problem is that they forgot to ask their mamas if it was okay first.

EXPLAIN to students that they are from the “Things Big and Small” Detective Agency. An evil human has hired them to find out as much as possible about Mizzle the Mouse and Electra the Elephant. The more the detectives learn, the better for their plan to take over the animal kingdom.

ASSIGN students to groups of four. Tell them that each group should have a detective that will keep detailed notes.

INVITE students to go on a hunt for information. Let them know that the information that Mizzle and Electra post can be seen by anyone, including the detectives. Each group should follow the digital trail of both animals, starting with the mouse and then the elephant. Stagger the groups so they are on the trail at slightly different times. They should fill out the **Animal Tracks Student Handout** as they go.

Teach 2: Digital Footprints

When students are finished, have them report on what they learned about each of the animals by reviewing the **Animal Tracks Student Handout** with them. Begin by teaching students the Key Vocabulary terms **digital footprint** and **permanent**.
Follow the Digital Trail

<table>
<thead>
<tr>
<th>Questions</th>
<th>Mizzle the Mouse</th>
<th>Electra the Elephant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Whose full name do you know?</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>2. Whose house could you find?</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>3. Whose birth date do you know?</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>4. Whose user name and password do you know?</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>5. Who let out a secret on the Internet?</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>6. Which animal can you describe better from his or her photo?</td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

**Questions**

1. **Who can the detectives find out more about, and why?** (Electra, because we now know where Electra lives, what she looks like, and private and personal information about her life. Point out to students that having a bigger digital footprint means the detectives can learn more about them too.)

2. **Which animal has a bigger digital footprint?** (Electra, because she put more private and personal information online than Mizzle.)

3. **Mizzle says some funny things about himself on the Internet. What are they?** (He says he likes Swiss cheese, his photo is of cheese, and he has a pet flea.)

4. **Is there anything that Electra posted on the Internet that could become a problem for her? If so, what and why?** (Sample response: Private and personal information (e.g., address, full name) allows others to learn more about her. This could be unsafe. Saying that she fights with her brother could hurt her brother’s feelings because it is public.)

CREATE a chart with students that summarizes which information is appropriate or inappropriate to put online. Here is a sample:

<table>
<thead>
<tr>
<th>Appropriate</th>
<th>Inappropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interests</td>
<td>Address</td>
</tr>
<tr>
<td>Hobbies</td>
<td>Full name</td>
</tr>
<tr>
<td>First name</td>
<td>Information that would hurt others</td>
</tr>
</tbody>
</table>

Also discuss how Mizzle and Electra both had very interesting information online, but Mizzle used better judgment about what was most appropriate to post. Mizzle had a smaller digital footprint. Electra put some information online that might make her unsafe or might upset her brother. Remind students that the Internet is a public space where people they do not know will likely see their information. And this information is very hard to remove. It is basically permanent.
Wrap Up and Assess

You can use these questions to assess your students’ understanding of the lesson objectives.

**ASK** What is a digital footprint, and what did Mizzle and Electra’s footprints look like? (A digital footprint is the information about you on the Internet. Mizzle’s footprint is pretty small and does not reveal private or personal information. Electra’s is large and contains information that could make her unsafe or upset others.)

**ASK** What kinds of information are appropriate to put on the Internet? What kinds of information are inappropriate to put on the Internet? (Appropriate: interests, hobbies, first name; Inappropriate: full name, address, hurtful information about others.)

**ASK** Can you put interesting and funny information online and still be appropriate? (Absolutely. Just look at the information that Mizzle posted.)

Extension Activity

Have students modify Electra’s trail. Ask students to make a new trail for Electra that contains information that is safer and more appropriate. In small groups, encourage students to think critically about how they might change the information in Electra’s “animal tracks.” They should write down these alternative pieces of information for each footprint. Have students report on the information they created and how they made their decisions.

Homework

Have students recount the story of Mizzle and Electra to their parents. They share why Mizzle put appropriate information online and why Electra put inappropriate information. They then share with their parents two things that are okay to reveal on the Internet and two things that are not okay.

**Alignment with Standards – National Educational Technology Standards for Students® 2007**

(Source: International Society for Technology in Education, 2007)

1. **Creativity and Innovation**
   a. apply existing knowledge to generate new ideas, products, or processes
   d. identify trends and forecast possibilities

2. **Communication and Collaboration**
   d. contribute to project teams to produce original works or solve problems

3. **Research and Information Literacy**
   d. process data and report results

4. **Critical Thinking, Problem Solving, and Decision Making**
   a. identify and define authentic problems and significant questions for investigation
   b. plan and manage activities to develop a solution or complete a project
   c. collect and analyze data to identify solutions and/or make informed decisions
### Digital Trail Squares

**Directions:** Cut out the squares below and pass out one square per person.

<table>
<thead>
<tr>
<th>Mizzle the Mouse</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name:</strong> Mizzle</td>
</tr>
<tr>
<td><strong>Where you live:</strong> Mouse hole</td>
</tr>
<tr>
<td><strong>Pet’s name:</strong> Frank the Flea</td>
</tr>
<tr>
<td><strong>Favorite Hobby:</strong> Ice skating</td>
</tr>
<tr>
<td><strong>Favorite food:</strong> Cheese</td>
</tr>
<tr>
<td><strong>My favorite photo:</strong></td>
</tr>
</tbody>
</table>

**Directions:** Cut out the squares below and pass out one square per person.

- **Name:** Mizzle
- **Where you live:** Mouse hole
- **Pet’s name:** Frank the Flea
- **Favorite Hobby:** Ice skating
- **Favorite food:** Cheese
- **My favorite photo:**
## Electra the Elephant

<table>
<thead>
<tr>
<th>Name:</th>
<th>Where you live:</th>
</tr>
</thead>
<tbody>
<tr>
<td>My full name is: Electra Ella Elephant</td>
<td>132 Water hole Lane, Peanuts, Ohio</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Birth date:</th>
<th>User name:</th>
<th>Password:</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 21, 2010</td>
<td>gray_toes</td>
<td>bamboo</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Secret:</th>
<th>My favorite photo:</th>
</tr>
</thead>
<tbody>
<tr>
<td>My brother and I fight all the time</td>
<td>![My favorite photo]</td>
</tr>
</tbody>
</table>
Directions
Follow the trails of Mizzle the Mouse and Electra the Elephant. Fill in the chart below. Then answer the questions.

<table>
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<th>Question</th>
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Question
1. Who can the detectives find out more about, and why?

2. Which animal has a bigger digital footprint?
Animal Tracks

3. Mizzle says some funny things about himself on the Internet. What are they?

4. Is there anything that Electra posted on the Internet that could become a problem for her? If so, what and why?
1. What is a digital footprint?
   a) A track that animals leave behind
   b) Shoes that you buy on the Internet
   c) The information about you on the Internet

2. What kind of information is safe to share online?
   a) Your birth date
   b) Your first name or computer user name
   c) Your address

3. Which animal below has the digital footprint that leaves him or her most unsafe?
   HINT: Think about which animal shares the most private information online.

<table>
<thead>
<tr>
<th></th>
<th>A) Fran the Fish</th>
<th>B) Betty the Bird</th>
<th>C) Tony the Tiger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hobbies</td>
<td>swimming</td>
<td>flying</td>
<td>going to the 3rd Street gym</td>
</tr>
<tr>
<td>Address</td>
<td>the sea</td>
<td>a nest</td>
<td>523 Green Street</td>
</tr>
<tr>
<td>Other</td>
<td>pet’s name is Frank</td>
<td>I love seeds!</td>
<td>My real name is Thomas</td>
</tr>
</tbody>
</table>

a) Fran the Fish
b) Betty the Bird
c) Tony the Tiger
1. What is a digital footprint?
   a) A track that animals leave behind
   b) Shoes that you buy on the Internet
   c) The information about you on the Internet

   *Answer feedback*
   The correct answer is c. Your digital footprint is the information about you online, such as a news story with your name in it or something that you write online.

2. What kind of information is safe to share online?
   a) Your birth date
   b) Your first name or computer user name
   c) Your address

   *Answer feedback*
   The correct answer is b. It is okay to share your first name or your user name online. But sharing your address or birth date could make your information unsafe because other people might use your information to pretend to be you!

3. Which animal below has the digital footprint that leaves him or her most unsafe?
   HINT: Think about which animal shares the most private information online.

   a) Fran the Fish
   b) Betty the Bird
   c) Tony the Tiger

   *Answer feedback*
   The correct answer is c. Tony the Tiger put private information online, like his address, which is not safe. Fran and Betty shared information, but they did not share anything private about themselves.
Some Facts

• 25 percent of kids and parents say they do not believe their personal information is safe online (Norton, 2009)

• Approximately 30 percent of kids ages 8 to 11 have a social networking profile even though the legal age is 13 on most sites (OfCom, 2007)

• It is projected that advertisers will spend $150 million on virtual worlds by 2012 (Research firm Parks Associates from CNET.com, 2009)

What’s the Issue?

Our kids live in a culture of sharing that has forever changed the concept of privacy. In a world where everyone is connected and anything created online can be copied, pasted, and sent to thousands of people in a heartbeat, privacy starts to mean something different than simply guarding personal or private information. In this context, you might think about kids’ privacy in three categories: privacy and security, privacy and reputation, and privacy and advertising.

• **Privacy and security:** This is the private information (e.g., Social Security number, first and last name) that could put kids at risk for identity theft if it got into the wrong hands.

• **Privacy and reputation:** The information that could be personally embarrassing or hurtful to them or others if posted publicly.

• **Privacy and advertising:** The information about their habits and behavior online that companies collect in order to target them with ads and other content.

Why It Matters

For good or bad, everything our kids do online creates digital footprints that migrate and persist. Kids share work with others and, as they get older, receive comments and feedback. This culture of sharing is beneficial in many ways. But if kids aren’t careful, their reputations can be harmed, or their information used in ways they never intended. For example, your child may think he or she just sent something to a friend, but that friend can send it to a friend’s friend, who can send it to their friends’ friends, and so on. Or they may innocently fill out an online form without understanding that this may make them vulnerable to identity theft. And their online behavior will likely be tracked without them knowing by the industry, which has little incentive to be responsible.

**common sense says**

• **Make sure kids get your permission before filling out forms.** Let kids know that you are the gatekeeper. They should ask your permission before filling out online forms, and they should always keep their Social Security number, birth date, address, and full name private.
• **Help kids think long term.** Everything online leaves a digital footprint. Help them think before they post so that they will be proud of their Internet presence down the road.

• **Remind kids that the Golden Rule applies online.** Remind kids that they will be treated online as they treat others. Whatever negative things they say can and probably will come back to haunt them, in more ways than they can imagine.

• **Help kids see through advertising.** The next time an ad pops up online, or you see that you are being targeted by ads specific to your interests, point it out to your kids. Let them know that some companies advertise to you based on what kinds of things you look at online.

### What Families Can Do

Draw a digital footprint with your kid and have him or her fill it in only with the kinds of information they would safely put online (younger elementary).

Bring up an age-appropriate webpage that has ads on it, and have your kids identify the ads (middle elementary).

Show kids how their email or personal pages have ads that differ from the pages of their friends (older elementary).