**Privacy and Security**

**Big, Big Data** – How do companies collect and use data about you?

**OVERVIEW:**

Every time we go online, we're giving away information about ourselves. But just how much data are companies collecting from us? Hint: It's probably a lot more than we realize. Show

your students these three tips on how to limit the data that companies collect.

**Students will be able to:**

- Explain why information about them and their behaviors is valuable to companies.

- Analyze how certain types of data are used by companies.

- Learn three strategies to limit individual data collection by companies.

**What You'll Need**

Take-home resources

* Blank paper
* Lesson Slides
* Student Handout: ThreadMeister
  + Student Version
* Take-home resources
  + Family Tips
  + Family Activity

**LESSON PLAN**

**Key Vocabulary:**

**Consumer:** A person who buys products or services to use

**Cookies:** Small text files stored on a computer that keep track of what a person does on a website

**Data:** Facts and statistics collected together to be used for different purposes

**Targeted advertising:** When apps or websites use information that they have collected about you to show you certain types of advertisements

**Warm Up: People Products - 7 mins.**

1. **Say:** Imagine you had the opportunity to design a brand-new product for teenagers. You can have any amount of money and materials you need. How would you come up with an idea? What questions would you ask? Take turns sharing with a partner. **(Slide 4)**

Invite students to share out. Explain that the most important questions you might ask are related to teenagers themselves: *What do they need? What do they like? What's important*

*to them?*

1. **Explain** that this is actually how companies and individuals think when they're designing products. For their products to be successful, first they need to know what **consumers** need, like, and want. Define consumer as a person who buys products or services to use. **(Slide 5)**
2. **Ask:** How do you think companies go about figuring that out? How do they learn what people will want to buy?

Invite students to share out. Explain that companies often do surveys of consumers as well as focus groups (talking to people), and they look at online data. Define **data** as *facts and*

*statistics collected together to be used for different purposes.* **(Slide 6)**

1. **Ask:** What kinds of data do you think companies look at the most?

Invite students to share out. Explain that one common type of data is online behavioral data: Companies want to know what their customers like to do, which sites they visit, and

which other products they buy. They use this information to design new products and to market existing products to new customers.

For example, if a company that makes cat food learns that a lot of their customers also buy dog food, they might start making dog food themselves, or they might start putting

advertisements for dog food near the cat food, or they might do both.

1. **Say:** There are many ways that companies get behavioral data: from their own websites, from other companies' websites, and from companies that collect data about people's online behaviors. Today we're going to learn more about how this works.

**Create: ThreadMeister - 18 mins.**

1. Distribute the ThreadMeister Student Handout and read the directions aloud.
2. Project Slide 7 and review the steps for completing the project. For Part 2, students can either hand-draw their product, or they can use an online tool such as Canva to create it. Students can also work in pairs or groups.
3. Allow students 15 minutes to work on their products, and then invite individuals or pairs to share out with the class. Highlight ways that students used the consumer data to make decisions about the design of their product.

**Wrap Up: Setting a Limit - 5 mins.**

1. **Explain** that even though you might appreciate that companies use behavioral information about you to make products you want, there also can be a downside: Companies will often use this information to do **targeted advertising**, which is when *apps or websites use information they have collected about you to show you certain types of advertisements* **(Slide 8).** Explain that targeted advertising can be helpful to people, but it can also sometimes cause people to buy things they don't need and/or can't afford. It also makes them more vulnerable to identity theft because there is more risk of private information being stolen.
2. **Project Slide 9** and explain that if you want to limit the information companies can track about your behaviors, there are things you can do. Call on students to read aloud the three options and answer any clarifying questions.

* For option 1, define **cookies** as *small text files stored on a computer that keep track of what a person does on a website*. **(slide 10)**

1. Send home the Family Activity and Family Tips.