

Level 3

Welcome to Digital Nagrik

Student Handbook



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Lesson 1

**Welcome to
Digital
Citizenship
Level 3**

01. OVERVIEW

Welcome to Level 3 of the digital citizenship Skills course. By this time, you should already know the basics of good online conduct. You have already learned about topics such as cyberbullying, digital well-being, and how to protect your personal data. In Level 3, we will be spending less time on the basics of being a good digital citizen, and more time exploring the good and bad sides of the internet. We will explore a few new technologies, talk about how to use the internet for good, and prepare you for the future as a digital citizen.

In this introductory lesson, we will review a few of the basics that you have already learned in Levels 1 and 2.

1.1. LEARNING OBJECTIVES

By the end of this lesson, you should be able to:

- Recall the key aspects of digital citizenship and apply your knowledge to real-life scenarios
- Enumerate key aspects of digital footprints
- Recall the ways in which you are not fully in control of your digital footprint
- Define the term 'threat modelling'
- List the questions you should be asking yourself about your online information and examine your digital footprint with these five questions in mind

1.2. PRIOR KNOWLEDGE

You should already know:

- Definitions of 'digital footprint' and 'online privacy'
- The importance of ensuring your online privacy

02. LESSON PLAN

2.1. RECAP: BEING A GOOD DIGITAL CITIZEN

Can you recall what you have learned about being a good digital citizen in Levels 1 and 2 of this Skills course? Have you been practicing these principles and working on being kinder, safer, and more secure online?



Let's refresh our memory with this video on [what it means to be a good digital citizen](#).



ACTIVITY WHAT WOULD YOU DO?

Let's read through a few different scenarios and think how a good digital citizen would respond.

Scenario 1

Your teacher Ms. Pinky creates a class blog for the English class. She grants everyone permission to compose, edit, and post comments on the blog. This is meant to inspire creative story-writing.

One day, Ms. Pinky is absent from school and Mr. Rahul is taking the class instead. Mr. Rahul is unaware of the blog and, hence, does not check it as Ms. Pinky would. Someone in the class has been posting mean comments about a student in the class.

You...

- Comment on the mean posts by saying: *This is not at all cool! I am his friend, what you are saying is not true!*
- Ignore it until Ms. Pinky returns and can deal with it.
- Get other students to post nice comments and compliments about the targeted student.
- Tell Mr. Rahul that someone is posting mean comments on the class blog and that he should inform Ms. Pinky.



Scenario 2

You have waited until the last minute to write your comparative essay for class. It is due tomorrow, and you are only halfway done. You are only able to start your work at 10:00 PM and you can't be up all night finishing the essay.

You run a few quick internet searches to see what other work is already out there on the subject. You find a great essay on the exact topic that you are writing about. Hooray! Now you won't have to be up all night writing this boring essay.

You...

- a. Insert a few copied paragraphs here and there into your essay. No one will be able to tell since you are still writing most of it yourself.
- b. You decide to just copy the whole essay into your document. You quickly go through it and do some basic rephrasing. That's enough, because you need to get some sleep!
- c. You do your research and find a few other sources that enable you to make your own comparisons and write the paper. You only sleep at 1:00 AM but, at least it is your own work.

Scenario 3

When Ila first got her phone, her parents were quite strict and monitored her screen time carefully. Each night, she had to give her phone back to her parents until the morning. It didn't matter to Ila because most of her friends didn't have phones anyhow.

After about six months, her parents began to trust her more and she got to keep her phone at night. At the same time, more of her friends got their own phones. Suddenly, they were messaging each other constantly.

Did you hear what happened today after school?

Who is that new kid in your class? He's kinda cute!

OMG, I'm still doing my homework, I hate school!!

If Ila keeps this up, what do you think some consequences might be? What do you recommend that she do?

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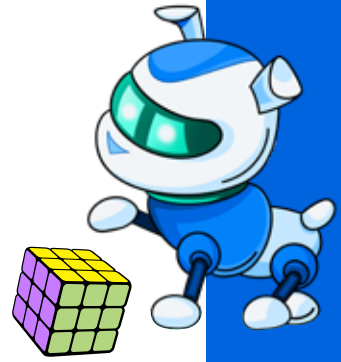
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ACTIVITY DIGITAL FOOTPRINT

Although we may be aware of our digital footprints, we probably don't think about them or about our privacy settings often enough.



So, let's re-examine our digital footprints.



KEY QUESTIONS

What is the key message that the speaker wants you to remember?

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The speaker mentioned how we create digital footprints for others. Have you done this? Do you tag friends in your posts? Do you ask their permission first?

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What would you do if a friend posted a photo of you that you didn't like? Have you confronted this situation before?

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List three rules that you must follow before publishing anything on social media.

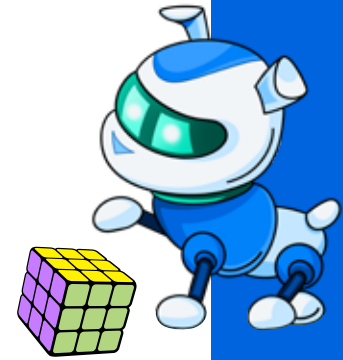
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ACTIVITY THREAT MODELLING

As you have learned already, protecting your privacy online is very important. But, as your digital footprint grows over time, is it possible to keep everything as private and secure as you would like it to be?



Let us learn the technique of threat modelling which can help us manage our digital footprint and keep ourselves secure.

? KEY QUESTIONS

What are the five important questions to ask about managing data that is already “out there” online?

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What were some suggestions given in the video to help you protect your privacy?

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What were some recommendations about passwords?

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What are the key accounts or data that you would like to keep safe from online predators?

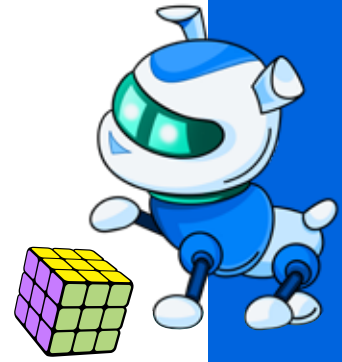
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What are some consequences you might face if you fail to keep this data safe?

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TAKE-HOME ACTIVITY
REFLECTION

Think deeply on the five key questions outlined in the video about threat modelling and record your thoughts. Write what actions you feel you can take to help keep your data as safe as possible.



KEY QUESTION	YOUR REFLECTIONS
What do you want to protect?	
Whom do you want to protect it from?	
How likely is it that you will need protection?	
How bad will be the consequences if you fail?	
How much trouble are you willing to go through to avoid these consequences?	

Based on my reflection, I will take the following actions:

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NOTES

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03. ADDITIONAL RESOURCES



1. Video | [“Human Rights in the Digital Age”](#), UN Human Rights, 21 November, 2018



2. Article | [“Digital Privacy Comes at a Price. Here's How to Protect It”](#), Robert Muggah, World Economic Forum, 8 September, 2021



3. Video | [“Think Your Email's Private? Think Again”](#), TED Global, October 2014



Lesson 2

Online

Friendships -

Safe or

Unsafe?

01. OVERVIEW

The digital world has become increasingly real over the last decade. In addition to the relationships that you have in real life, you also have online ones, sometimes with the same people. However, you may also form friendships with people you have never met in real life or people you have met only once. Being aware of the situation and your comfort level is important, as is giving these new friendships time.

How much do you share, what information or feelings do you wish to keep private, and how do you draw boundaries? These are all critical questions to reflect upon.

1.1. LEARNING OBJECTIVES

By the end of this lesson, you should be able to:

- Analyze your online friendships from a safety perspective
- Explain whether information is safe or not safe to share with an online friend
- Recognize 'red flag feelings', think through different options, and respond appropriately to a situation

1.2. PRIOR KNOWLEDGE

You should already know:

- The basics of social media platforms and their usage
- Safety precautions to navigate websites and common applications

02. LESSON PLAN

2.1. EXPLORING ONLINE FRIENDSHIPS



Let's begin by exploring [who you're talking to online](#).



KEY QUESTIONS

What are the pros and cons of online communications with your friends?

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What are the positives and negatives of having online friends that you have not met face-to-face?

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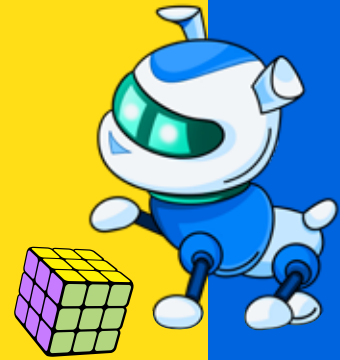
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ACTIVITY

SCENARIOS: TWO ONLINE FRIENDSHIPS

Let's explore the situations described below and consider how we would handle them.



Scenario 1

Priya loves taking pictures and posting them on Instagram. A few months ago, she noticed Rahul_chat had liked several of her photos and commented: *You are so talented!*

Priya was flattered. Then she received a private message from Rahul_chat asking whether she was a professional photographer or if she wanted to be one someday. Priya responded that it was her dream to be one when she grew up.

Now they talk a lot through private messaging. Priya also posts comments on Rahul_chat's photos, which are mostly of random objects and nature scenes. Last week, Rahul_chat asked if she would post more selfies because: *I think u r pretty*. Rahul_chat also messaged her a mobile phone number so that she could send more pictures. He then texted: *Just don't tell anyone I gave you this*

Scenario 2

Priya's basketball coach connected her with Neel, a player he coaches from another school. Priya and Neel have other common interests, like music and gaming. They have been chatting off and on for about a month through a social media messenger app.

They talk about games and problems they are having at school with friends. They have also told each other their favourite teams and players. Last week, Neel sent Priya some memes of basketball players that included some bad language and inappropriate images. He mentioned that she should probably make sure her parents don't see it.



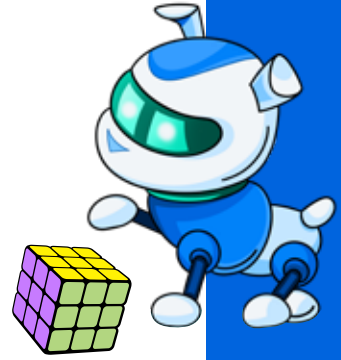
KEY QUESTIONS

Which of the two situations is riskier? Why?

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Have you ever had an uncomfortable or awkward interaction with someone online?
What did you do?

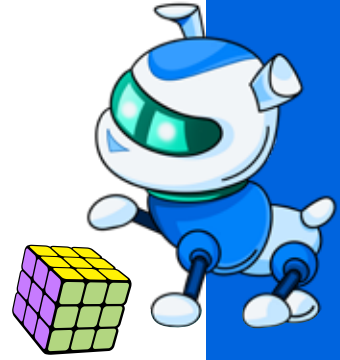
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Tip

- Always be careful when sharing information online, especially if you do not have any real-life connections with the people who will be viewing the information.
- Never share private information online, even if you know the person in real-life.
- When in doubt, ask a parent or trusted adult.





2.2. FEELINGS AND OPTIONS

ACTIVITY GROUP DISCUSSION

Your teacher will divide you into groups to discuss one of the two scenarios above. Together with your group, discuss the questions given below.



KEY QUESTIONS

What is Priya feeling?

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Why is the situation challenging for her?

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How could Priya handle this situation? Write down the different options available to her. Come up with as many ideas as possible! Then circle the option you think will have the most positive outcome.

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Which option did your group choose from all those you brainstormed? What were the reasons for choosing it?

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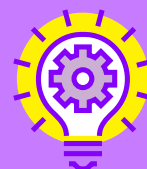
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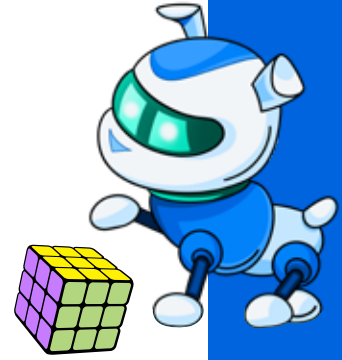
Did You Know?

A red flag feeling is when something happens to make you feel uncomfortable, worried, sad, or anxious. A red flag is a warning of a possible problem—a “gut feeling” that something is just not right.

An example of this might be when you feel that someone should not ask you such a thing or when you are asked to do something that you should not be doing.



When you have a red flag feeling, it's important to slow down, pause, and think about how you're feeling. Taking these steps will help you think through the options you have for handling the situation.



ACTIVITY REFLECTION

Consider each of the questions below and write down your responses.

KEY QUESTIONS

How will you use what you have learned today in your own online friendships?

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If you could give Priya one piece of advice for her online friendships, what would it be?

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03. ADDITIONAL RESOURCES



1. Article | [“Online Safety”](#), KidsHealth, April 2018



2. Article | [“Teens, Friendships and Online Groups”](#), Monica Anderson, Jingjing Jiang, Per Research Center



3. Article | [“Things to Watch Out for with Online Friends”](#), eSafety Kids, eSafety Commissioner, Australian Government



4. Article | [“ Making Online Friends the Safe Way”](#), Get Safe Online



Lesson 3

**Relationships
and
Boundaries**

01. OVERVIEW

Relationships are important to us all—whether friends or family. But at times, it can be a challenge to keep everything balanced. Your teen years are marked by a distinct desire to be your own person with the freedom to pursue and explore your interests independently. Your friendships become increasingly important as they provide you with a safe space to share, confide, and derive support from each other. However, it's also possible that the constant presence of digital devices and social media make a complicated mix, and these same relationships can sometimes overwhelm you and get in the way of your self-care and mental well-being.

1.1. LEARNING OBJECTIVES

By the end of this lesson, you should be able to:

- Identify the similarities and differences in dealing with relationships in person and online
- Reflect on how your relationships are affected by always-on connected devices
- Identify the qualities of healthy and rewarding relationships
- Brainstorm strategies for navigating challenging relationships

1.2. PRIOR KNOWLEDGE

You should already be familiar with:

- Common texting and messaging apps

02. LESSON PLAN

2.1. CONDUCTING OUR RELATIONSHIPS IN PERSON AND ONLINE



ACTIVITY DISCUSSION

In the table below, list the ways in which texting or messaging is similar to and at the same time different from speaking to your friends in person (face-to-face).

Is there a difference in what you talk about and how? Explain.

SIMILARITIES	DIFFERENCES

2.2. FRIENDSHIPS, DIGITAL DEVICES, AND SOCIAL MEDIA



Let's explore the topic of friendships and boundaries through a short video.



KEY QUESTIONS

Which are the apps that you use to stay in touch with friends?

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How often are you texting or messaging with your friends? Do you think it is too much, not enough, or just right?

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Note down how devices and social media affect your friendships. Is it more positive or negative?

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What boundaries have you created when communicating with friends online? Would you like to set boundaries?

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2.2. SETTING BOUNDARIES



Boundaries

Limits and invisible lines that we set for ourselves. They are guidelines on what we feel comfortable with and the expectations we have of the people we interact with.



ACTIVITY TWO FRIENDS: A SCENARIO

Read through the scenario given below and answer the questions that follow.

Arin and Gaurav are classmates and close friends. Gaurav's father recently gave him his old phone and Gaurav immediately joined the social media world. Both Gaurav and Arin are sports enthusiasts and they love to follow their favourite football teams online.

Since Gaurav got his phone, Arin wanted one too. He worried that he was missing out, not knowing what was happening outside of school. His joy knew no bounds when his grandparents gifted him a phone on his birthday. He quickly joined social media and started messaging Gaurav every day. At first, Arin was happy to stay in touch with friends after school.

However, lately, Gaurav has made many new friends who regularly get together for online gameplay. Arin finds it hard to make time for gaming, which annoys Gaurav. Arin feels bad for letting his friend down.

Every time Gaurav has a disagreement with one of his gaming friends, he sends long messages to Arin or even calls him late at night. This takes up a lot of Arin's time, but as he wants to be supportive, he doesn't complain to Gaurav. The constant calls and messages have become overwhelming. He is also worried about his friend. Arin feels that he needs to set boundaries but he isn't sure how.



KEY QUESTIONS

Who are the people involved in the above scenario? Why might the situation be challenging for each of them?

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How could this situation be handled? Come up with as many ideas as possible. Choose one option that might lead to a positive outcome for both boys.

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Remember

- Label your feelings. It's important to first understand your own feelings to set effective boundaries. Is it anger, frustration, disappointment, or hurt that you are feeling?
- If you have a feeling that something is not quite right in a friendship, listen to your gut feeling.
- It is perfectly OK to say "no" to a friend.





NOTES

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03. ADDITIONAL RESOURCES



1. Article | [“Social Media Use May Affect Teenagers’ Real Life Relationships”](#), The New Indian Express, 22 February, 2018



2. Video | [“The Problem with Parents, Kids, and Social Media”](#), The Atlantic, 10 September, 2018



3. Article | [“5 Ways to Help Teens Set Boundaries with Friends”](#), Barbara Greenberg, US News and World Report, 13 February, 2018



4. Article | [“Resisting Peer Pressure: How to Set Healthy Boundaries with Friends”](#), The Social Impact Firm

Lesson 4
**Fear of
Missing Out
(FOMO)
and Your
Mental Health**

01. OVERVIEW

In this digital age, exploring your identity, pursuing different interests in addition to school and nurturing friendships can often mean that you are connected 24x7. You may think that you are multitasking efficiently, but all this can take a toll on your physical and mental health. By knowing how to spot the warning signs and create strategies for change, you can learn how to take good care of yourself and your mental well-being.

1.1. LEARNING OBJECTIVES

By the end of this lesson, you should be able to:

- Define 'FOMO' (fear of missing out) and explain how it might drive increased screen time
- Critically analyze the reality of your social media feeds
- Explain the impact of excessive screen time on physical and mental health
- Evaluate your screen time habits and decide if you need to make changes to them

1.2. PRIOR KNOWLEDGE

You should already know:

- The culture of social media posting and photo sharing
- Your personal habits regarding screen time and social media usage

02. LESSON PLAN

2.1. DISCUSSION



KEY QUESTIONS

What is your average screen time in a day, not including schoolwork? Do you know?

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What do you spend most of your online time on?

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Did You Know?

US teens spend an average of more than seven hours per day on screen media for entertainment, and tweens spend nearly five hours—not including time spent using screens for school and homework.



2.2. FOMO – “FEAR OF MISSING OUT”

Have you heard the expression ‘FOMO’ before? What does it mean to you?



Let’s watch a video
and take a look at
what FOMO is.



ACTIVITY CASE STUDY

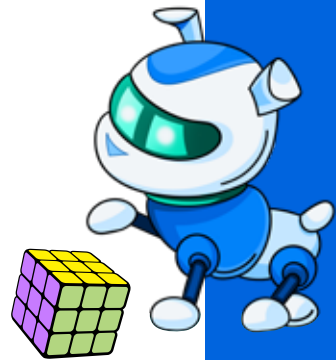
In small groups, read and discuss the case study given below.

Ananya and Teena

When they were growing up, Ananya always looked up to Teena, the older girl from the flat just opposite hers. They were often together, riding bikes, having sleepovers, laughing, and having a good time. The older Teena got, the more Ananya could see her personality changing. She often seemed stressed about becoming popular at school, something that had never bothered her when they were younger.

They spoke less and less as time went by. Ananya would often see Teena’s social media where she was constantly posting pictures and selfies claiming to have been to fabulous parties or gone on shopping sprees, events that Ananya knew never happened.

One day, Ananya decided to go see Teena as she was worried about her friend. Teena looked so tired and worn out, not at all how she looked even two years back. After a long conversation, Teena admitted that she was suffering. She wanted to be popular, to keep up with the others at school who do these fabulous things. She didn’t want to feel left behind but she was more miserable than ever. She could barely sleep at night and her grades had been suffering too.



? KEY QUESTIONS

Why would Teena make up stories to post on social media?
Is she suffering from FOMO?

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What advice should Ananya give to Teena to improve her mental health?

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Is there a difference between your real life and what you choose to post on social media? Explain.

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ACTIVITY PAIR UP AND REFLECT

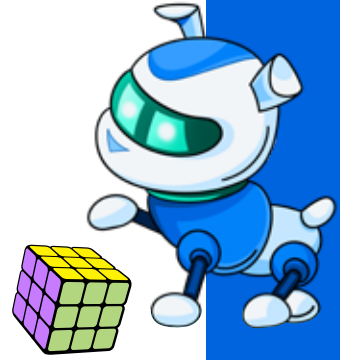


Watch this video [where teens like yourselves talk about how they experience social media and friendship.](#)

? KEY QUESTIONS

One of the students in the video mentioned that even when he and his friends are spending time together, they tend to be on their phones. Does that happen to you? Explain.

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What kinds of stories are you posting on social media? Do you try to make your story seem exciting, even if it is only a study session?

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Do you always tag all the friends who are in your photos or posts? Have you ever not tagged someone who was with you in the photo?

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Think about the last time someone said to you: *You totally missed out that day! You should have been there!* How did it make you feel? How did it make your friend feel?

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What are some activities or events that you would hate to miss out on? Why?

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Do you think FOMO can be stressful? Can it affect your friendships or your mental health? How?

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Did You Know?

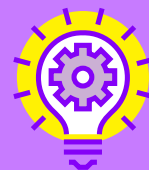
Several studies have confirmed that FOMO can be experienced by people of all ages.

One study found that FOMO was greater on social media platforms where there is a high degree of overlap with your offline friends.

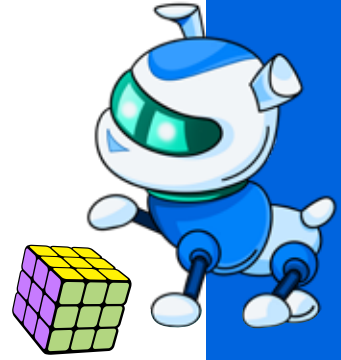
In other words, if most of your friends are regularly posting on Instagram or Snapchat, you might have higher levels of FOMO and check those accounts often to see what you are missing.

But, if you mainly use Twitter or YouTube, where your offline friends are not your primary connections, then your FOMO may be lower.

The National Stress and Well-being Survey in Australia found that teens who checked their social media more frequently (five or more times a day) are significantly more likely to experience aspects of FOMO. Worries range from missing get-togethers to being left out of inside jokes.



ACTIVITY
TACKLING OUR FOMO



? KEY QUESTIONS

Share two things that you can do to deal with the fear of missing out.

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Tips to Tackle FOMO

- Escape the fast-paced world of social media by taking a break from logging in.
- Remain more mindful of important human relationships. Live in the now, engage in person.
- Reclaim the time otherwise spent on social media. Spend time with your pets, pick up that favourite hobby again, speak to or visit an elderly family member, or volunteer for a good cause.
- Find comfort in your own life and celebrate what and who you have around you. Practice gratitude.
- Accept that we all have limited time, and that we can't possibly participate in everything.



ACTIVITY
SELF-ASSESSMENT

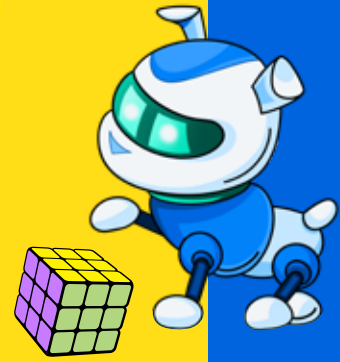
Take this short quiz to help evaluate your screen time on social media.

1. How much time do you usually spend on social media daily?

- A) Less than an hour
- B) 1-2 Hours
- C) 3-4 Hours
- D) 5-6 Hours

2. You've taken a photo. How long does it take you to edit and upload it?

- A) About a minute
- B) A couple of minutes
- C) 5-10 minutes
- D) Half an hour



3. When are you most often distracted by social media?

- A) Very rarely
- B) When I'm eating
- C) During conversations
- D) When I'm supposed to be doing work
- E) All the time

4. Do you feel your social media use is negatively impacting your relationships?

- A) Absolutely not
- B) I don't think so
- C) I've been told off a couple of times
- D) Only with certain people
- E) Yes, quite a bit

5. Has anyone close to you ever complained about your time on social media?

- A) Never
- B) Maybe once or twice
- C) My parents
- D) My teachers
- E) Yes, every time I go on my phone

6. Do you scroll through social media near bedtime or when you are in bed?

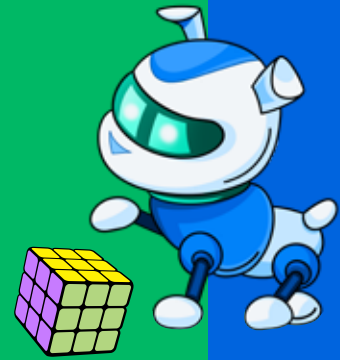
- A) Never
- B) I only answer text messages
- C) I have a little scroll
- D) I try to limit it to around 30 minutes
- E) Definitely!

7. How often do you check social media notifications?

- A) Once a day
- B) A couple of times throughout the day
- C) Every couple of hours
- D) Probably once an hour
- E) Every 10-20 minutes

8. When you do not have access to social media, how do you feel?

- A) It doesn't bother me
- B) Relaxed
- C) Bored
- D) Like I'm missing out
- E) Anxious



9. How would you feel if you got no likes on a post?

- A) I do not care
- B) Meh. It probably wasn't a great post!
- C) Must. Try. Harder.
- D) I'd ask friends to like it
- E) Embarrassed, I'd delete it

RESULTS

Now, tally your responses and check them against this key.

Mostly As – Off the Grid

You really don't care about social media. You post maybe once a month so that distant relatives know you're around. You like to communicate with friends face-to-face.

Mostly Bs – Casual Browser

You love to scroll through Twitter and garner all of your inspiration from Instagram. It's not a bad thing to take inspiration from others, but you make sure to look at a variety of accounts to hone in on your own style and preferences, rather than just following the crowd.

Mostly Cs – Timeline Trapper

Neither one extreme nor the other, you can embark on an hour-long scroll, but you also know when to put the phone down. Work on asking yourself whether your time spent on social media is adding to or detracting from your life, and answer honestly.

Mostly Ds – Super Social

You often find yourself in a social media hole. You post every day across all accounts and have to document your every move. When you're out, try challenging yourself to keep your phone away so you aren't tempted to update your location or post your #favenewdish.

Mostly Es – Can't Stop Scrolling

You've probably got RSI (repetitive strain injury) in both thumbs and are overcome with anxiety and FOMO when separated from your phone. You show no signs of slowing down though. Try turning off notifications and use your phone's screen time settings to restrict your use.



NOTES

A series of horizontal dotted lines for writing notes.

03. ADDITIONAL RESOURCES



1. Article | [“How to Deal with FOMO in Your Life”](#), Elizabeth Scott, Verywell Mind, 25 April, 2021



2. Article | [“How FOMO Impacts Teens and Young Adults”](#), Sherri Gordon, Verywell Family, 6 January, 2022



3. Video | [“Are You Living an Insta Lie? Social Media vs. Reality”](#), Ditch the Label



Lesson 5

Civil

Discourse

Online

01. OVERVIEW

Controversial topics often lead to passionate feelings either for or against the topic. Some people take to social media to express their views, often in response to a news article, a statement from an official, or even a TV show or movie's portrayal of the topic. Due to the nature of social media, it is possible that things could get out of hand. By understanding the concept of civil discourse, you can avoid the headache that comes with being drawn into a flame war with someone.

1.1. LEARNING OBJECTIVES

By the end of this lesson, you should be able to:

- Understand how a flame war could get started
- Identify characteristics that will cause a flame war to escalate
- Define the terms 'internet troll', 'flame war', and 'civil discourse'
- Identify tips to avoid a flame war

1.2. PRIOR KNOWLEDGE

You should already know:

- The basics of netiquette and golden rules about internet civility
- Social media basics

02. LESSON PLAN

2.1. DEBATE



ACTIVITY CLASS DEBATE

In this activity, your class will be debating whether there should be homework assignments in your school.



First, let's watch a video about the pros and cons of homework. Notice how the arguments for or against homework are being discussed.

This debate will take the form of a Twitter-style chat. There will be no spoken words between the teams. Everything will be communicated using the Twitter style of chatting (tweets).

Team 1 will be students: The students hate homework because it creates too much work. They want it stopped.

Team 2 will be teachers: The teachers love homework and use it to teach students. They do not want it stopped.

Note

This will be done in real life using pen and paper. No use of Twitter will be allowed for this activity.

No profanity or swear words will be tolerated in this debate. If any "tweet" uses a swear word, it will automatically be thrown out and your "account" will be suspended.





Tweet Debate Rules

- A tweet can be no more than 20 words long. This includes abbreviations or chatspeak.
- Use no more than 3 emojis.
- There must be no profanity or swear words in any tweet.
- Each team can generate as many tweets as possible in the allotted time.
- Each team member should have a Twitter name. Names will be Student A, Student B, Student C or Teacher A, Teacher B, Teacher C, and so on.
- All tweets should be labelled either as "new tweet" or "responding to student A". This starting phrase will not count in your word count.
- All tweets should be written on a piece of paper which will be displayed on the board for all to see. Please write your tweets large enough to be read from a distance.
- Your teacher will decide the time limit.

Examples

Student A: New Tweet: *HW is soooo lame! and Mrs Jones gives the worst HW, I hate her class* 🙄🙄

Student J: Reply to Student A: *Lucky you don't have Mr Smith, 1000% worse than Jones. up til 12 last night for no good reason*

Teacher C: New Tweet: *These kids always CRY 😭 about HW, they need to buckle up, get it done and learn something!!*

Teacher F: Reply to Teacher C: *Seriously! We didn't even have the internet and we got it done! #oldschool #snowflakes #teachersrock*

TAKE-HOME ACTIVITY
REFLECTION



KEY QUESTIONS

What happened in your Twitter debate? Which side won?

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**Were there any tweets or responses which made you angry? How did you respond?
Are you still angry?**

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Do you think that using names like Student A and Teacher B helped or hurt the debate?

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**Have you ever gotten into this kind of back-and-forth argument on social media before?
Share your experience.**

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**Do you think that this was really a debate? Did any of you change your mind about the
topic based on the tweets from the other group?**

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Definitions You Should Know

Internet Troll

An individual who posts false accusations or inflammatory remarks on social media to promote a cause or to harass someone.

Flame War

An ongoing tirade of contrasting opinions about a topic in a Twitter feed, blog, internet forum, newsgroup or multi-user chat session.

Empathy

The ability to understand and share the feelings of another person.

Civil Discourse

A conversation in which there is a mutual airing of views without hate. It is not a contest, but it is intended to promote greater understanding.



Now, let's learn some [helpful tips for healthier online interactions](#).

Recap the Five Tips

1. Stay calm.
2. Don't get personal.
3. Use "I" statements.
4. Listen to their point of view.
5. If things go too far, step back.

ACTIVITY WORKSHEET



Complete pages 2 and 3 of the [Disconnected Discourse](#) worksheet.



NOTES

Lined area for notes, consisting of multiple horizontal dotted lines.

03. ADDITIONAL RESOURCES



1. Video | "[Civil Discourse Online: A Conversation with Cameron Kasky](#)", Common Sense Education, 12 August, 2019



2. Video | "[Internet Trolls: Born That Way?](#)", Above the Noise, 25 January, 2018



3. Article | "[What is Civil Discourse?](#)", American University School of Public Affairs



Lesson 6

Hacking - The Good and Bad of It!

01. OVERVIEW

Most of us toggle between search engines, websites, digital platforms, and apps without giving it a second thought. Our multiple online identities (email IDs, social media pages, user IDs for different sites) help us to work, study, play, and shop. It is critical to be aware of dangers like identity theft, phishing scams and malware. At the root of all these threats lies hacking. But hacking isn't always a negative thing. Depending on the situation, hacking can be malicious or it can serve a higher ethical or legal purpose.

1.1. LEARNING OBJECTIVES

By the end of this lesson, you should be able to:

- Define the term 'hacking' and understand its positive and negative aspects
- Define 'ethical hacking' and its importance
- Explain the variety of roles that hackers play
- Differentiate between the types of hackers

1.2. PRIOR KNOWLEDGE

You should already know:

- Digital security basics
- Basic definitions of the terms 'hacking', 'phishing', and 'spam'
- Ways to keep personal data safe
- Implications of personal data being used by thieves



02. LESSON PLAN

2.1. HACKERS AND HACKING

ACTIVITY

WHO IS A HACKER?

Have you heard the term 'hacking'? What do you know about it and the people who do it?



Let's watch an informative video to find out all about the different types of hackers.

Now that you have watched the video and learned a bit more about hackers, mark the statements below as either "True" or "False".

- Any activity that seeks to compromise a digital device, computer system, or a network is defined as hacking.
- Hacking is always illegal.
- Malware and scams are examples of malicious cyber activity that can affect anyone.
- All hackers are cyber criminals.
- Hackers can be employed by companies and organisations to help make their data secure.

Definitions You Should Know

Hacking

The activity of identifying weaknesses in a computer system or a network to exploit its security and gain access to personal data or business data.

Hacker

A person who uses computers to gain access to data.





2.2. DIFFERENTIATING THE DIFFERENT TYPES OF HACKERS

Which kinds of hackers are legal and which ones illegal? What do the different kinds of hackers do once they have hacked into a system?



To help us understand this, let's watch this video and find out more about the varied motivations that drive hackers to do what they do.



KEY QUESTIONS

Have you ever heard or read about a company being hacked? What do you remember from these stories?

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Who is an "ethical" hacker and why are they called ethical? Do you think ethical hacking is important?

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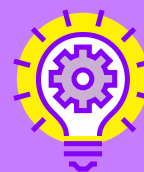
Give one example each for the kind of work a white and black hat hacker would perform.

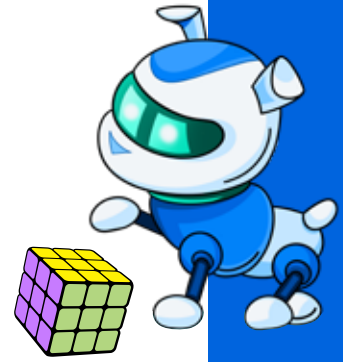
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Believe It or Not

Kevin Mitnick is the world's most famous hacker. He was once on the FBI's "Most Wanted" list (USA) for hacking into 40 major corporations and even served five years in an American prison in the mid 1990's.

He now works as security consultant to some of the biggest corporations, organisations, and governments worldwide.





ACTIVITY
HOW VULNERABLE ARE WE TO HACKING?



Let's meet the
[Cyber Ninja](#).

? KEY QUESTIONS

What is the key security tip that you learnt from the Cyber Ninja? What was the reason for his security tip?

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The Cyber Ninja mentioned a few examples of products which can be hacked. What was the main product that he discussed and are there any other products that you can think of which might be easily hacked?

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ACTIVITY
GROUP DISCUSSION

Form pairs or small groups and discuss the below question. Be ready to share your ideas with the class.

? KEY QUESTION

How can you protect your identity and data online? Share three key strategies.

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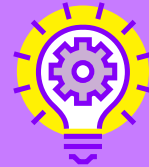
What Do You Think?

Edward Snowden was an intelligence contractor at the National Security Agency (NSA) in the USA when he leaked sensitive documents to the media. These documents revealed the full extent of the NSA's surveillance of American citizens and international partners.

The leak included information that the NSA had access to the accounts of its citizens' Google, Yahoo, Apple, and other private accounts. The NSA, and therefore the US Government, was secretly collecting millions of emails and chat content lists, which can be considered as abuse of the privacy of US citizens.

Snowden is quoted as saying: *All I wanted was for the public to be able to have a say in how they are governed.*

Some believe that he is a hero while others think that he violated the law in his country and should face the consequences.



ACTIVITY

KNOWLEDGE RECAP

How cyber-safe are you?

1. You have the responsibility to keep:

- A. Yourself safe
- B. Your stuff safe
- C. Your cookies safe
- D. Both A and B
- E. Both B and C

2. Whom do you tell if you see something harmful online?

- A. Your parents
- B. Your teachers
- C. A trusted adult
- D. All the above

3. What is personal information you should keep safe?

- A. Your shoe size
- B. Your address
- C. The pizza restaurant's phone number



4. You can totally share your password with your best friend, you trust them!

- A. True
- B. False

5. Which of the following is an online threat?

- A. Identity theft
- B. Phishing
- C. Surfing
- D. Both A and B
- E. Both A and C

6. What should you do if you are online and someone you don't know messages you claiming to be a student at a nearby school?

- A. Do not accept their invitation to chat (it could be someone trying to trick you)
- B. Accept the invite and make a new friend

7. Whatever you post online will stay there forever even if you delete it.

- A. True
- B. False

8. What do you do if someone is bullying you online?

- A. Ask them to please stop
- B. Say you will tell on them
- C. Stop, block, tell an adult

03. ADDITIONAL RESOURCES



1. Article | ["Cybersecurity in Education: What Teachers, Parents and Students Should Know"](#), Berkeley Extension



2. Article | ["White Hat, Black Hat, and Grey Hat Hackers: What Do They Do, and What Is the Difference Between Them?"](#), Tripwire, 7 February, 2021



3. Article | ["Kids/Teens Cyber Security Do's and Don'ts"](#), Gabriel Friedlander, Wizer



Lesson 7

New

Technology -

Facial

Recognition

01. OVERVIEW

Rapid advances in technology have ushered in developments like location services and smart devices which have made our lives easier than ever before. However, these come with hidden threats to our privacy and security. Facial recognition is one such technology. On one hand, concerns are being raised over its increasing usage and, on the other hand, there are legitimate doubts about its accuracy. It is important to know that, as citizens, you have the right to privacy in public places. Yet, so far, no one is asking for your permission to track your face in this way. Strict regulations may be helpful to prevent misuse of these systems but those are yet to be put in place.

1.1. LEARNING OBJECTIVES

By the end of this lesson, you should be able to:

- Define 'facial recognition' and explain how it is currently being used
- Identify the benefits and privacy risks that facial recognition technology entails
- Evaluate whether the benefits outweigh the privacy risks

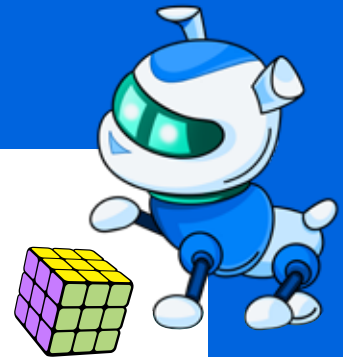
1.2. PRIOR KNOWLEDGE

You should already know:

- How phones or other devices use fingerprint or face recognition to unlock the device
- The concept of privacy, especially with regard to law enforcement or governments

02. LESSON PLAN

2.1. FACE RECOGNITION



ACTIVITY
DISCUSSION

? KEY QUESTIONS

Share examples of devices that you can unlock with your face.

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Have you ever used this to unlock a device? What about your friends or family?

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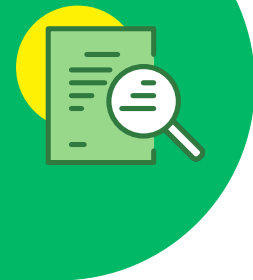
Definitions You Should Know

Facial Recognition

A way of recognizing a human face through technology. It uses biometrics to map facial features and compares the information with a database of known faces for a match.

Faceprint

A digital scan of a human face used to identify people using the unique characteristics of their facial structure.



Let's watch this video to find out whether facial recognition is invading your privacy.

Now that you know a bit more about the technology, share below all the benefits and risks associated with facial recognition.

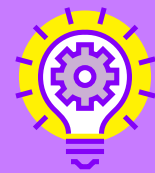


BENEFITS	RISKS

ACTIVITY

Facts on Facial Recognition Technology

- 72% Of hotel operators are expected to deploy facial recognition by 2025 to identify and interact with guests.
- 35% Of facial recognition errors happen when identifying dark-skinned women, compared to 1% for white males.
- By 2023, 97% of airports will roll out facial recognition technology.



TAKE-HOME ACTIVITY
TAKE A STAND

Consider the scenario given here and reflect on the questions that follow.



Mrs. Sharma is the Principal of a very prominent and sought-after school in the city. In one of her Board meetings, the subject of streamlining security and attendance systems is raised after an incident of vandalism at the school. A senior teacher suggests the introduction of facial recognition that has been tried in some countries and proved to be helpful.

After some enquiries, Mrs. Sharma receives a proposal from a well-known technology company that specializes in facial recognition. The company promises to design a system that allows students to enter the school using their faces. That way, any unauthorized entry into the school premises can be curtailed. The company informs Mrs. Sharma that the system could be expanded to include parents of the students also.

Do you think Mrs. Sharma should install facial recognition technology to improve security and attendance at the school?

Take a stand

Think carefully about this issue and tell us if you strongly agree or disagree with the above decision. Explain your reasons for your stand on the subject.

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Stand Back

Now that you have heard out those who are opposed to your stand, share with us your thoughts. Was there anything that made you rethink your stand? Even if you didn't change your opinion, perhaps it left an indelible impact on your mind. Briefly explain. (This could be a fact, an opinion, or an interesting piece of information.)

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Look Again

Reflect once again on your original response regarding technology and privacy. Maybe there is something that you now “see” differently or something that you had never paid attention to before. How has your thinking shifted after hearing your classmates' perspectives, even if you haven't changed your mind?

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Remember, our perspectives can evolve, shift or deepen when we listen to others!

Look Beyond

Looking beyond this specific case, how does this dilemma remind you of other situations that we've explored in class or that you have seen, heard about, or experienced?

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ACTIVITY
REFLECTION

Take a moment to reflect on the activity and then respond to the following prompt.

I used to think,
and now I think



NOTES

A series of horizontal dotted lines intended for writing notes.



NOTES

A series of horizontal dotted lines spanning the width of the page, providing a template for taking notes.

03. ADDITIONAL RESOURCES



1. Article | [“How Facial Recognition Software Works”](#), Steve Symanovich, Norton, 20 August, 2021



2. Article | [“Survey: 43% of Americans Approve, 33% Disapprove of Facial Recognition Technology in Airports”](#), Runaway Suitcase



3. Video | [“How Does Facial Recognition Work?”](#), Interesting Engineering, 24 July, 2020



Lesson 8

Big Data and Targeted Marketing

01. OVERVIEW

Prior to the internet age, most product advertisements would run in a newspaper, a magazine, or on TV. It was difficult to target the ads at any specific group because many different people were reading the same newspaper or watching the same TV program. In the 21st century, advertisers are able to target their ads to a specific group of people based on big data. Now with big data, we are all at risk of being overwhelmed with ads based on our digital footprint. You must ask yourself: *What is big data and how exactly is it used to send ads to me?*

1.1. LEARNING OBJECTIVES

By the end of this lesson, you should be able to:

- Define 'big data' and understand how it is used in targeted marketing
- Understand how your digital footprint and actions online are generating big data
- See how a marketer uses big data to create and market new products

1.2. PRIOR KNOWLEDGE

You should already know:

- Which online actions contribute to your digital footprint
- The fact that ads are targeted to people based on their digital footprint

02. LESSON PLAN

2.1. BIG DATA



Let's watch a video to explore the term 'big data' and what it means to our lives.



Definitions You Should Know

Data

Facts and statistics collected together for reference or analysis.

Big Data

A collection of data that is huge in volume yet growing exponentially with time.

Big Data Analytics

The often-complex process of examining big data to uncover information such as patterns or market trends.



ACTIVITY BIG DATA AND YOU



Can you write down your name and your age? I am sure you can. Can you write it down for everyone in your class? Or for everyone in your school? Or everyone in your town? Everyone in the country? Everyone in the world? And then write down their age, their favourite colour, their favourite animal, their favourite TV programmes, almost anything you can think of [...] for millions and millions of people?

That's too much, isn't it? You can't do it, and I can't do it. But some computers can do this, and we call it 'big data'. Data is all the stuff we are writing down and you can imagine, for millions, billions, gazillions of people. It is really BIG.

What can we do with all this data? We can find patterns. For example, people making television programs may discover that children who like music really like drawing too, so they could make a new program about music and art. Or hospitals could discover that people who like different foods may get sick in different ways as they get older. That could help families and doctors look after our grandparents better.

Donald Farmer
Vice President - Product Management, Qlik





KEY QUESTIONS

How are you generating big data?

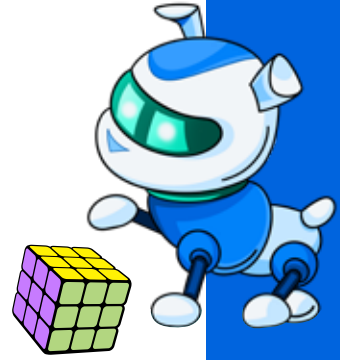
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How might big data and big data analytics help you?

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How might big data and big data analytics create problems for you?

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ACTIVITY

LET'S USE BIG DATA LIKE A MARKETER

Step 1: Collect the big data

Imagine that you wish to start your own business making some kind of frozen treats, but you are unsure what kind of treats are popular.

You decide to go to a large online grocery chain to buy some data from them. Once you see the data, you will decide what treat to make and sell.

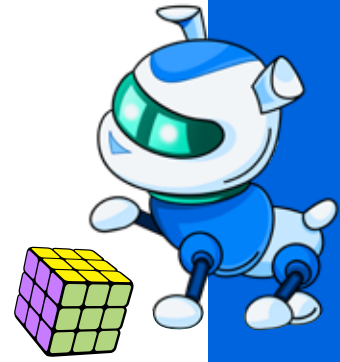


Now, let's run a class survey about frozen treats which we will use to collect our big data.

Step 2: Develop a product based on big data

Your teacher will divide you into groups. Based on the data from the class survey (your big data purchase) you must develop a product.

Each group should answer the following questions to define their product's characteristics



- What kind of frozen treat will you sell?
- In what flavour(s)?
- How will your customer eat it? In a cone? On a stick?
- Will you sell it all-year-round or only seasonally?
- Where will you sell it?
- What is the name of your product?

Step 3: Develop your marketing plan

Now that you have created your product, you must decide on a marketing strategy. You have purchased more data which tells you the below information. This data will help you select your marketing strategy. Select one answer for each category based on your product.

• Category A: Product tie-ins

1. People who like **ice cream**, also like cakes.
2. People who like **frozen fruits** also like to eat salads and soups.
3. People who like **kulfi** also like breakfast cereals like corn flakes.
4. People who like **frozen milkshakes** also like to eat kathi rolls and burgers.
5. People who like to eat **ice lollies** also like to eat pizza.

• Category B: Location

1. People who like to eat frozen treats in the **park** also like to go to the beach.
2. People who like to eat frozen treats at **home** usually search for recipes online.
3. People who like to eat frozen treats at the **mall** usually order food delivery.
4. People who like to eat frozen treats at **parties** also like to shop for clothing online.

• Category C: Social Media Platforms

1. People who like **chocolate** and **vanilla** flavours mainly use Facebook.
2. People who like **pista** flavour mainly watch videos on YouTube.
3. People who like **mango** flavour mainly use Instagram.
4. People who like **coconut** flavour mainly use LinkedIn.

Based on the above categories, select which apply to your new product and create a marketing strategy accordingly.

Here's an example to help you work out your product and strategy:

The frozen treat product that I have developed is vanilla ice cream for people who like to eat it in the park.

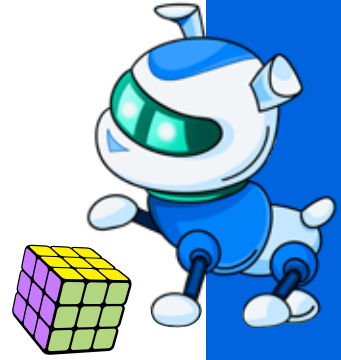
Based on this product, I know that the people who will buy my product also like:

- Eating cake
- Going to the beach
- Using Facebook

My marketing strategy is to...

- Run a promotion together with a popular cake bakery
- Run ads together with a hotel located in Goa near the beach
- Run ads on Facebook

ACTIVITY
REFLECTION



KEY QUESTIONS

After six months of selling your product, how might you use big data to understand whether you should make changes to your product or your strategy?

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How much data do you think businesses would like to collect about you to target products directly to you?

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Given what you now know about big data, can you identify steps to reduce your exposure to targeted marketing? Think about what you have learned in previous lessons on topics like digital footprints and cybersecurity.

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TAKE-HOME ACTIVITY
CRAFT YOUR PRODUCT BRAND IMAGE

Most brands will have an image that expresses something about them. They want customers to see their image and instantly think of the product. Think of the stylized font of the Coca-Cola logo combined with the curved bottle shape, or the Apple logo on the iPad.

Develop a logo which may include an image, a stylized script, and/or a tagline which conveys something about your frozen treat product. You may use any software to develop your logo or you may use coloured paper and pens or paints as well.

NOTES

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03. ADDITIONAL RESOURCES



1. Article | [“Explaining Big Data to Kids”](#), Jyotsna, Jigsaw, 14 November, 2014



2. Video | [“Social Media Data Privacy Awareness”](#), Technology Services at Illinois, 1 April, 2016



Lesson 9

**Machine
Learning,
Algorithms,
and Your Feed**

01. OVERVIEW

In previous lessons, you have learned how advertisers will target you based on your previous search history or the websites you have visited. Likewise, video streaming services will make video recommendations based on your viewing history. Have you wondered how this is accomplished? In this lesson, you will learn about machine learning and the algorithms which enable the recommendations that you have come to rely upon.

1.1. LEARNING OBJECTIVES

By the end of this lesson, you should be able to:

- Define the terms 'algorithm', 'machine learning', 'K-nearest neighbour', and 'data void'
- Explain how machine learning is used to recommend similar subjects or topics based upon your past search or viewing history
- Identify tips to minimize the impact of algorithms on your feed

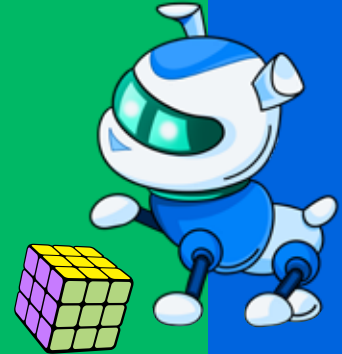
1.2. PRIOR KNOWLEDGE

You should already know:

- How your digital footprints impact what is known about your online preferences
- How marketers use data to display targeted ads to specific users
- That video streaming services offer suggestions of content that you might like based on your streaming history

02. LESSON PLAN

2.1. RECOMMENDATIONS



ACTIVITY CASE STUDY

Read Nisa's story and answer the questions that follow.

Finally, exams are over! Nisa cannot wait to get home because she needs to catch up on the Korean drama that she has been hearing about. She rushes home and logs into her video streaming service. The next thing she knows, she has spent 4 hours bingeing the show. She decides to take a break until the next day so that she can get some sleep.

The next day when she logs into her streaming service, she notices a long list of recommended Korean dramas on the home screen. Not only that. After she started following the lead actor on social media, she keeps seeing recommendations to follow other K-drama stars and she sees a lot more video clips of K-drama and K-pop on her feed.



KEY QUESTIONS

Have you had an experience like Nisa's? What was the situation?

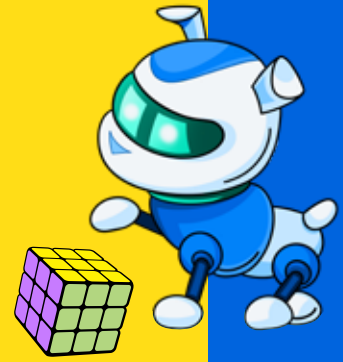
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Do you feel that the recommendations you see are helpful? What might be the downside

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Do you understand how you receive these recommendations?

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2.2. WHAT IS MACHINE LEARNING AND WHAT ARE ALGORITHMS?



Let's watch an informative video and discover the basics of [machine learning](#).



KEY QUESTIONS

What is your understanding of machine learning after watching the video?

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What is an algorithm and how do algorithms play a part in machine learning?

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How about Nisa's story? Is this an example of machine learning?

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Definitions You Should Know

Machine Learning

The use and development of computer systems that are able to learn and adapt without following explicit instructions, by using algorithms and statistical models to analyse and draw inferences from patterns in data.

Algorithm

A procedure in machine learning that is run on data to create a machine learning model or output.

Machine learning algorithms perform "pattern recognition". This is how algorithms "learn" from data. There are many machine learning algorithms such as "K-nearest neighbour".

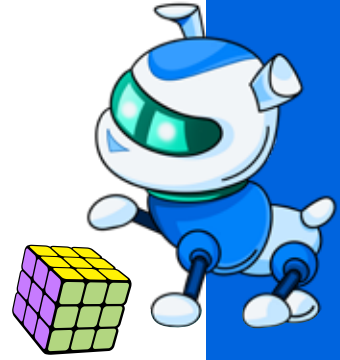


TAKE-HOME ACTIVITY THINK-PAIR-SHARE

Form pairs or small groups. Let's act like a search engine using machine learning:

- Select one of the words provided in the table. If you were a search engine, what types of results would you show for the word you selected?
- What suggestions for further information would you also provide (the K-nearest neighbour information)?

One example has already been done for you.



SEARCH WORD	SEARCH RESULTS	SUGGESTIONS FOR FURTHER INFORMATION
Pool	Definitions, photos, videos, locations of swimming pools and billiard halls	Schools for swim lessons or billiards coaching, where to buy a pool table or billiards equipment, where to buy a swimming costume
Pizza		
Diwali		
Dance		
School		

When you're done, be ready to share your responses with the class.

2.2. .3 ALGORITHMS IN ACTION



Do you think that machine learning is [helpful](#), [harmful](#), or [a little bit of both](#)? Let's watch the video to find out.



KEY QUESTIONS

How can algorithms reinforce something that you already believe?

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Explain what a data void is and how it allows false or unverified content to come to the top of your internet search?

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What are the tips offered in the video about how to safely enjoy social media?

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ACTIVITY QUIZ

Attempt the quiz below by circling the correct answer for each.

1. An Algorithm is...

- a. A procedure to gamify data so that you keep seeing cat videos
- b. A procedure run on data to produce a machine learning output
- c. A procedure to keep you binge-watching videos all night long
- d. A procedure to teach you about machine learning

2. One tip to safely enjoy online or social media searches is...

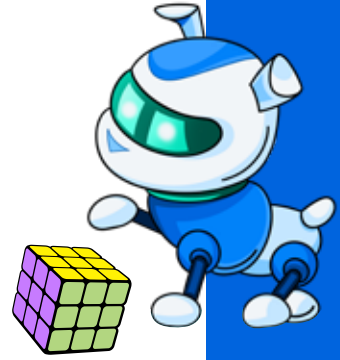
- a. Follow as many people as possible
- b. Create a fake social media handle
- c. Watch all the suggested videos
- d. Be on the lookout for odd or unrelated search results

3. Machine Learning is...

- a. When a machine goes to university to learn
- b. When a machine networks with other machines to learn from one another
- c. When a machine is learning how to identify a cat photo after examining hundreds of similar photos
- d. When a machine stores research books in its memory

4. A K-nearest neighbour algorithm is...

- a. One way in which streaming services can identify videos you might like based on your past viewing
- b. One way to identify which two pieces of data are side-by-side in the memory of your computer
- c. One way in which streaming services can identify videos that are trending
- d. One way to find two completely different movie recommendations and present them to the viewer



03. ADDITIONAL RESOURCES



1. Video | [“An Intro to AI Made for Students”](#), Reena Jana, Google The Keyword, 22 February, 2022



2. Article | [“7 Benefits of AI in Education”](#), David Karandish, THE Journal, 23 June, 2021



3. Article | [“What is Machine Learning? A Definition”](#), Expert.ai Team, expert.ai, 6 May, 2020



Lesson 10

**Spot the Fake
News -**

Internet

Investigator 2

01. OVERVIEW

You already know the expression: *Don't believe everything you hear*. But what about everything you see? In today's hyper-digital world, it is easier to fake videos, websites, and news articles than ever before. It is easier not only to create these, but to spread them as well. It is important that you become well-informed digital citizens who can stop the spread of disinformation. You will learn some techniques to help you to check the credibility of and corroborate the information you see.

1.1 LEARNING OBJECTIVES

By the end of this lesson, you should be able to:

- Define the terms 'disinformation', 'misinformation', and 'corroboration'
- Explore the consequences of spreading misinformation online
- Learn what lateral reading is and how you can use it as a strategy to verify the accuracy of information online
- Apply lateral reading to determine website accuracy

1.2 PRIOR KNOWLEDGE

You should already know:

- The basics of fake news and clickbait from previous lessons

02. LESSON PLAN

2.1 EXAMINING INTERNET VIDEOS



Have you seen [the amazing story of the pig who saved a baby goat from drowning?](#)



Let's see [how that amazing story was captured on video.](#)



Now, let's examine [how such a video can easily go viral.](#)

Definitions You Should Know

Disinformation

False information that is spread with the intent to deceive.

Misinformation

False information that is spread, regardless of intent to mislead.

Both disinformation and misinformation can have big consequences like:

- Increasing tension and anger between groups of people
- Damaging the reputations of individuals or groups
- Affecting the outcome of elections
- Impacting the public's understanding of vaccines or pandemic-related protocols



2.2 FROM VERTICAL TO LATERAL

Definitions You Should Know

Vertical

In a direction, or having an alignment, such that the top is directly above the bottom (up and down, or top to bottom).

Lateral

Of, at, towards, or from side to side. Synonym: Horizontal

Corroboration

Additional source(s) that confirm or support the claims of a news story, article, or piece of information.



One methodology that everyone can use to confirm whether an article or video is real is called “lateral reading”. Given the above definitions, what do you think this means?

Lateral reading—in contrast with vertical reading—is the practice of checking and verifying what you read as you read it.

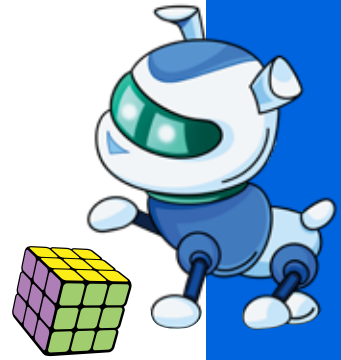
It is easy for websites to present information as authentic, just by using official-looking logos and domain names, or other such manipulative tricks. Many of us may even have fallen prey to these tricks. This happens because we tend to read vertically, staying within a single website without attempting to find out whether it is reliable or not.

Fact-checkers, on the other hand, make sure to read laterally. They will typically leave a site after a quick scan and open up new browser tabs looking for alternate versions of the news story so that they can compare and judge the reliability of the original site for themselves.

ACTIVITY
DISCUSSION



Let's break into pairs and examine [the website of The Pacific Northwest Tree Octopus](#).



? KEY QUESTIONS

What do you think about the website 'The Pacific Northwest Tree Octopus'? Does it look legitimate or real?

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How can we check if the tree octopus is real? Think laterally.

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If you saw this website for the first time, do you think you would believe it? (Remember the baby goat). Why or why not?

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Surprisingly many students believed the website of the tree octopus.

A 2011 US Department of Education study that used the tree octopus website as a focal point revealed that students who encountered this website completely fell for it. In an NBC news story, Scott Beaulieu wrote: *In fact, not only did the students believe that the tree octopus was real, they **actually refused to believe researchers** when they told them the creature was fake.*

Think About it

A good-looking website can be very convincing, regardless of what it says. A good rule of thumb is to take a moment to think logically:

- Does the website claim sound logical? Is it something that you have heard in the past?
- Does the website stand up to scrutiny? Can you do an internet search on the listed “sources”? What do you find?
- Remember what you learned about clickbait: *If it is too good to be true, then maybe it is not.*



ACTIVITY REFLECTION

Take a few minutes to write down your reflections on what you have learned today by answering the below questions.



How can you avoid being fooled by fake online information? How can you check to make sure that an article or video is factual and real (not altered or staged)?

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How might personalized content—determined by what we like, follow, and click on—create problems when it comes to news? How might these “filter bubbles” influence our lives?

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Since clickbait is often fake information designed to get you to click, how can you recognize a clickbait headline?

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ACTIVITY QUIZ

Choose which answer is correct for each of the questions given below.

1. Why is lateral reading a more effective way of determining misinformation than reading vertically (scrolling down a page)?

- a. Staying on the page and reading closely doesn't always help you determine whether information is credible
- b. A website might look authoritative and official, but that doesn't always mean it's reliable
- c. You need to find corroboration to verify a source's claim
- d. All of the above

2. The intention of the creator behind the "Pig Rescues Baby Goat" viral video is an example of:

- a. Credibility
- b. Disinformation
- c. Corroboration
- d. Lateral reading

3. Kuldeep often gets his news from YouTube. In one video he watched, someone reported that the government is changing the legal voting age to 16. Why is it important for Kuldeep to verify the credibility of the video before believing it or sharing it?

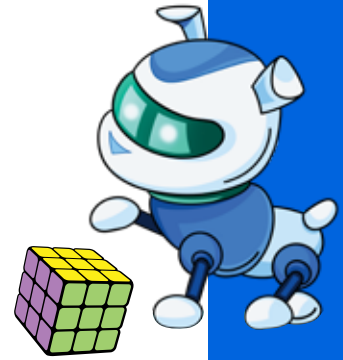
- a. To make sure his friends find the video interesting too
- b. To get more likes if it is a verified video
- c. To prepare in case someone disagrees with the video in his post
- d. To make sure others don't believe or share disinformation

4. Abhiram is helping his younger sister prepare a report on healthy eating. She found an article about the negative effects of eating fish. The website looks reliable, and his sister wants to quote some information from the article. What advice should Abhiram give his sister?

- a. Make sure to include the website's URL in the report
- b. Ask a friend if they think the information on the website is real
- c. Share the website on social media so others can see what she is working on
- d. Research the information from the website to make sure it is credible

5. How confident are you in knowing how to verify the accuracy of the information you find online?

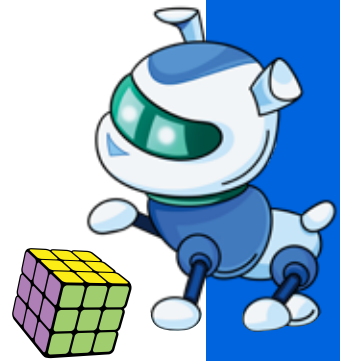
- a. I feel very confident
- b. I feel somewhat confident
- c. I do not feel confident



TAKE-HOME ACTIVITY
USING WIKIPEDIA CAREFULLY



Watch the [video about the use of Wikipedia](#) and document three ways in which you can use Wikipedia successfully.





NOTES

Dotted lines for writing notes.





NOTES

A series of horizontal dotted lines for writing notes, filling the majority of the page.

03. ADDITIONAL RESOURCES



1. Video | [“Check Yourself with Lateral Thinking: Crash Course Navigating Digital Information #3”](#), Crash Course, 23 January, 2019



2. Article | [“What are Deep Fakes - And How Can You Spot Them?”](#), Ian Sample, The Guardian, 13 January, 2020



3. Infographic | [“How to Spot Fake News from Factcheck.org”](#), CSI Library



Lesson 11

Confirmation Bias

01. OVERVIEW

You have already learned how algorithms send you suggestions based on your existing preferences. This can include movie suggestions, search results, or news feeds. Are the suggestions that you receive beneficial to you? Have you noticed that the suggestions seem to get better over time? While this may be in part due to the algorithms, this is also due to your cognitive biases, especially your confirmation bias. Confirmation bias allows you to see more posts about things that you like but, is it narrowing your view by excluding things that you do not like?

1.1. LEARNING OBJECTIVES

By the end of this lesson, you should be able to:

- Define 'confirmation bias' and identify why it occurs
- Explore examples of confirmation bias
- Explain how confirmation bias leads to a reinforcing news feed on social media
- Identify strategies for challenging your own confirmation biases
- Enumerate the consequences of confirmation bias on you and society

1.2. PRIOR KNOWLEDGE

You should already know:

- That machine learning algorithms identify stories, videos, and search results that you might like
- That fake news sources exist on the internet

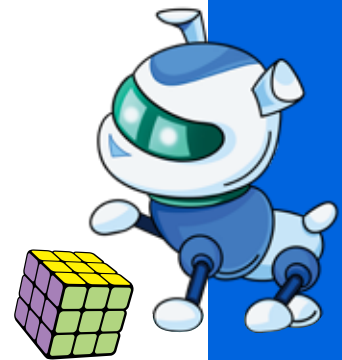
02. LESSON PLAN

2.1. REAL OR FAKE?

ACTIVITY GUESS WHICH IS WHICH

Let's examine some headlines together. Only one of these headlines is real. Can you guess which one?

1. *Japan Finally Abandons Microwave Ovens by 2022*, by Ima Rider, January 12, 2022
2. *New iPhone Will Come with a Holographic Keyboard and Projector*, by Wren Rudd, January 12, 2022
3. *Australia to Introduce 33 Different Genders on Passports*, by Jordan Lee, January 12, 2022



ACTIVITY UNDERSTANDING OUR BIASES

Have you ever heard the term 'cognitive bias'? What does it mean?



Let's watch a video and discover what the most common cognitive bias is.



KEY QUESTIONS

What happened in the video? Why did it take so long for people to solve the puzzle?

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What is confirmation bias?

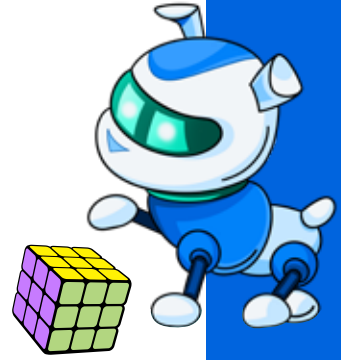
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Do you have any examples of confirmation bias from your own experience?

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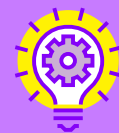
What did the host say was a good way to overcome confirmation bias?

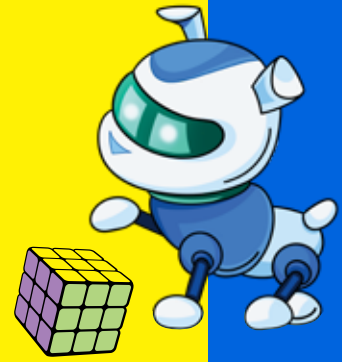
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Confirmation Bias

A tendency to interpret new information by looking for information that is consistent with one's existing beliefs or theories.





ACTIVITY

THINK-PAIR-SHARE

Pair up with a classmate for this activity.

Amit and Sara are two diehard cricket fans. Read their profiles together with your partner. Next, look at the headlines listed below and determine for each one, whether it is more likely to feature in Amit's newsfeed or Sara's. Keep in mind that not only do they love to read about the accolades of their favourites, but they also like to see when the other player falls short.

Be ready to share your answers with the class.

Meet Amit

Amit is an avid cricket fan, and he loves Virat Kohli. In his mind, there is absolutely no doubt that Virat is the best batsman and captain that the Indian Test team has ever had. Not only that, he is an upstanding citizen and role model for all. Virat has crushed all the records held by Sachin Tendulkar and can rightly take his place as the number one Indian batsman of all time.

Meet Sara

Sara is an avid cricket fan, and she loves Sachin Tendulkar. There is no doubt in her mind that the Master Blaster was and is the best batsman that Indian cricket has ever known. Not only that, he is an upstanding citizen and a role model for all. She is tired of all the hype about Virat Kohli. He's always trying to stay in the spotlight, more focused on celebrity than cricket.

Headlines

- *Virat Ties Master Blaster for Most Centuries Against One Team*
- *Virat Kohli's 100th Test: Defining Moments of His Glittering Career*
- *Sachin Inducted into ICC Cricket Hall of Fame*
- *Virat Kohli Quits RCB Captaincy, No Decision on Replacement*
- *Coach Expresses Support in Spite of Virat Kohli's Lean Patch*
- *Virat Kohli Steps Down as RCB Captain, "There is Nothing to Be Shocked About"*
- *Sachin Remembers the Time Virat Called for His Help, "I am Always Open to Helping the Next Generation"*
- *Virat: "In 2014, I Called Sachin Tendulkar and Asked for His Help"*
- *Sachin's Diehard Fan Cycled to Lahore to Support India in 2006 Pakistan Tour*
- *Kohli's Seven Year Captaincy Ends in SA Defeat*
- *Tendulkar Saves Injured Bird in Viral Video Melting the Internet's Heart*
- *Virat Kohli Gets GOAT (Greatest of All Time) Icon on Twitter - Netizens Can't Keep Calm*
- *Late Lata Mangeshkar Loved Cricket and Sachin Tendulkar*
- *Kohli to Leave Team Mid-tour for Birth of His First Child: "I Want to Be There for My Wife"*
- *MS Dhoni's First Priority is Nation, No Paternity Leave for Birth of His First Child in 2015*
- *Remembering the 2003 World Cup Loss, Sachin's Biggest Disappointment*



KEY QUESTIONS

How might confirmation bias impact how you consume or interpret the news?

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How do you select which accounts to follow on social media? Are there any accounts or websites that you don't like or won't follow? Why?

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2.2. CONFIRMATION BIAS AND YOUR NEWS FEED



Let's watch and understand [how journalists think about confirmation bias](#).

Think!

Can you understand how your news feeds can be individualized based on the algorithms trying to find items that you might like to see?

If this is the case, what are you not seeing?

Are you missing out on other perspectives?



Filter Bubble

A situation in which an internet user encounters only information and opinions that conform to and reinforce their own beliefs, caused by algorithms that personalize an individual's online experience.



Now that we know how our news feeds might be biased, let's watch this video to see [what we can do about it](#).



KEY QUESTIONS

What were two suggestions given in the video?

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What other suggestions do you have based on this lesson and previous lessons?

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What are the repercussions of a newsfeed which only reinforces our confirmation bias?

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TAKE-HOME ACTIVITY TAKING ACTION!

Examine your news sources and social media feed. Identify what kind of confirmation bias is being reinforced by these sources. Document your plan to diversify your sources and seek different opinions and information.

Make a poster about confirmation bias, the filter bubble, and how to break your biases in news sources and social media feeds.





NOTES

Dotted lines for note-taking.

03. ADDITIONAL RESOURCES



1. Video | [“Why Do Our Brains Love Fake News?”](#), Above the Noise, 3 May, 2017



2. Article | [“How Confirmation Bias Work”](#), Kendra Cherry, Verywell Mind, 30 July, 2021



3. Video | [“How Can You Burst Your Filter Bubble?”](#), BBC Trending, 3 June, 2017



Lesson 12

**Social Media
for Social
Good**

01. OVERVIEW

Is the internet good or bad? Is social media an instrument for self-promotion or is it a medium to connect and build a community? Like any other tool, the nature of its usage is what makes all the difference. The internet and social media can be used to wreak havoc or to do immense good for society. The future will provide you with plenty of options to participate in either, and as a digitally aware citizen, you will have to make responsible choices. Let's explore the positive impact that you can bring about by finding your passion and leveraging social media for good.

1.1. LEARNING OBJECTIVES

By the end of this lesson, you should be able to:

- Explain what it means to find your purpose and why it is beneficial
- Consider different ways that others have used their digital footprint to make a positive impact on the world and whether you might do something similar
- Reflect on what your own purpose might be by identifying a problem you see
- Reflect on the skills and knowledge that you can bring to bear to make an impact

1.2. PRIOR KNOWLEDGE

You should already know:

- Social media apps and how they are being used by influencers or celebrities
- How your digital footprint impacts your personal and professional life

02. LESSON PLAN

2.1. GOOD OR BAD?

ACTIVITY DEBATE

Consider this question: *Are the internet and social media apps a blessing or a curse?*

You will be divided into two groups, one for and one against the above statement. You will then have 2-3 minutes to develop your arguments, after which time, the debate will begin.

On which side of the debate were you? Share your arguments below:

For or Against

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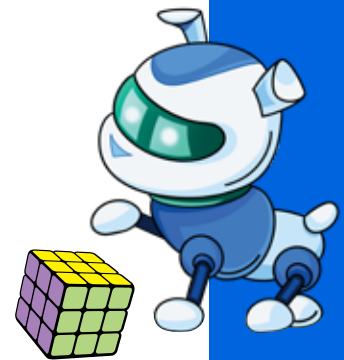
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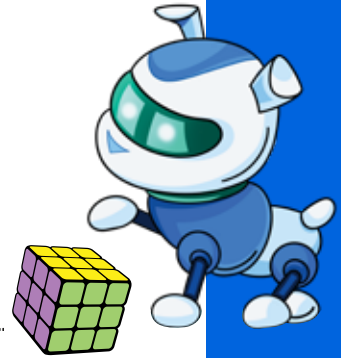
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ACTIVITY
CAMPAIGNS AND CAUSES



? KEY QUESTIONS

Outside of keeping in touch with friends, what are some of the benefits of social media? How can it help you to grow and lead a more fulfilling life?

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Share any examples you've seen of teens or young adults using social media to advocate for causes they are passionate about. They may be influencers, organizers, campaigners, artists, performers, content creators, or just students creating real impact on ground.

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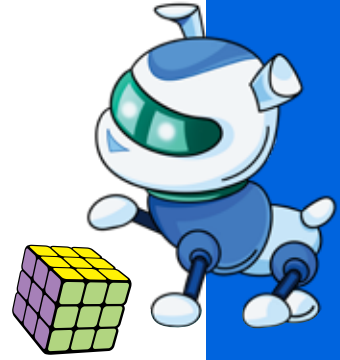
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Let's watch this video to see how a group of American teens used social media for good.

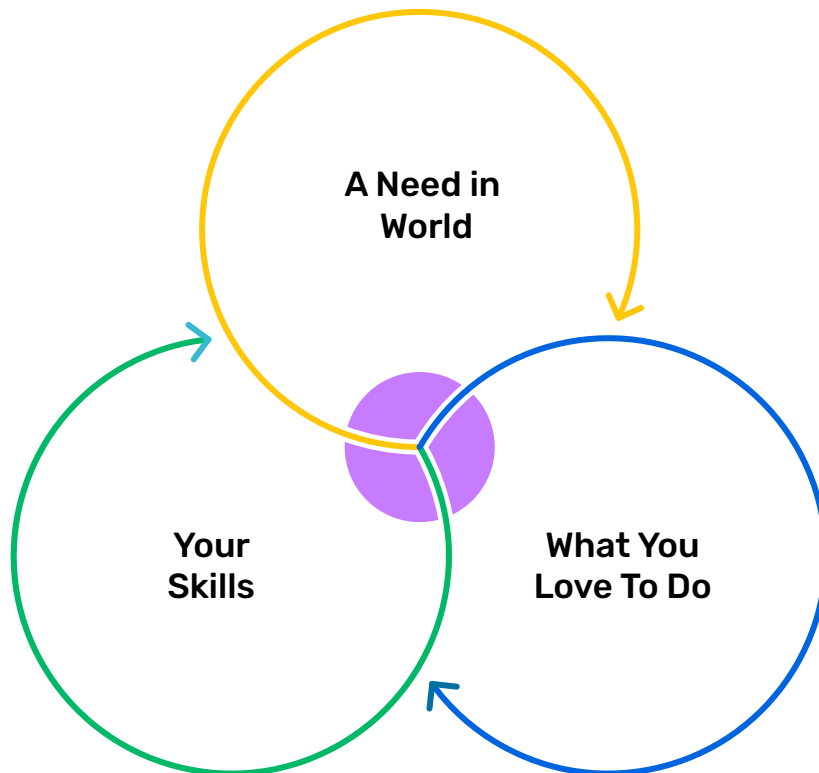
ACTIVITY
WHAT'S MY CAUSE?



Fill up the 3 intersecting circles below to arrive at your purpose:

- **A need in the world:** Something that bothers you immensely, that you think needs to change. It makes you really mad or sad!
- **Your skills:** What you get complimented on all the time, something that comes naturally to you.
- **What you love to do:** How you would spend your time if you had no responsibilities.

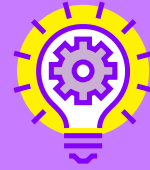
At the intersection of these 3 circles may lie **your purpose**.



Purpose

A stable and generalized intention to accomplish something that is at the same time meaningful to the self and consequential for the world beyond the self.

William Damon
Director of Stanford Center on Adolescence



A need I see is...

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My skills are...

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What I love to do is...

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My purpose is...

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TAKE-HOME ACTIVITY
WRAP UP

What are your insights from this exercise?

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How can you use technology and social media to do good in your own life?
Share two examples.

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Make an action plan to work on your purpose. How can you leverage the
intersection of technology and purpose to amplify your actions?

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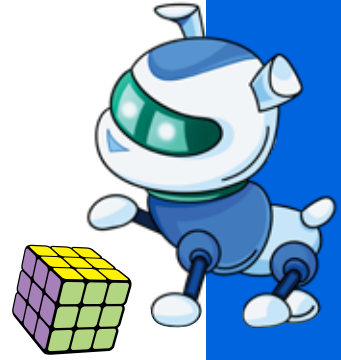
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Action Plan Template

My Goal is: (For example: Collect 100 story books to give to less fortunate students ages 5-10)

Action Description	Action Doer	Start Date	End Date	Resources Needed (People, Items, etc.)	Expected Result of My Action
Make a poster which explains what I am trying to do and asking for book donations	Me	15/4	17/4	<ol style="list-style-type: none"> Poster software like Canva, Adobe Spark, etc. A drop-off location to be able to collect my books 	I will have a poster ready to share which can be used on social media, in school and in my community



NOTES

Lined area for notes, consisting of multiple horizontal dotted lines.



NOTES

A series of horizontal dotted lines for taking notes.

03. ADDITIONAL RESOURCES



1. Article and Video | [“Seven Ways to Help Teens Find Purpose”](#), Patrick Cook-Deegan, Share My Lesson, 5 January, 2018



2. Article | [“Meet These Six Young Climate Activists Fighting for a Better World”](#), Simran Rawat, Youth Ki Awaaz, 25 April, 2020



3. Article | [“Meet the 18 Young Environmental Activists Chosen by the UN for Its Global Climate Change Campaign”](#), Divya Gandhi and Bindu Gopal Rao, The Hindu, 7 November, 2021



4. Article | [“Activities to Help Your Teen Discover their Passion and Purpose”](#), Beta Bowl



Lesson 13

Building Your Digital Profile

01. OVERVIEW

Research shows that happiness in life is less about what you do and more about why you do it. When your actions have purpose, they lead to positive results. As you continue to explore what your purpose is, consider different ways that people have used their digital footprint to make a positive impact on the world. It is not about the digital footprint; it is about your impact on your community. By doing good, you can also do well.

1.1 LEARNING OBJECTIVES

By the end of this lesson, you should be able to:

- Explain how digital footprints become increasingly important as you get older
- Learn that there are people your age who are making a difference in this world and how you can become one of them
- Refine your purpose and turn it into action
- Reflect on your digital footprint to ensure that it accurately represents who you are and how you want the world to know you

1.2 PRIOR KNOWLEDGE

You should already know:

- The importance of digital etiquette
- That once you post something, you cannot take it back, even if you delete the post
- How digital footprints shape how others perceive you
- The fact that many colleges, universities, or future employers are likely to check your social media accounts before making a final offer
- How to categorize positive and negative digital footprints

02. LESSON PLAN

2.1 DIGITAL FOOTPRINTS



ACTIVITY CASE STUDY

Does anyone remember the story of Prateek from Digital Citizenship Level 2? Let's revisit his story.

Prateek's University Admissions

Prateek has applied for admission to a prestigious university. He has good grades and has cleared the entrance exams and interviews. One day he receives an email from the university saying that he will not receive admission to the school due to the university's zero-tolerance policy on bullying.

Prateek is surprised as he has not bullied anyone since he got into high school. He decides to go to the admissions counsellor to find out the exact reason for the rejection of his application.

The admissions counsellor shows him an objectionable and abusive writeup he had posted around 6 years ago about a classmate. The university had seen this online and reconsidered Prateek's application in a new light.

? KEY QUESTIONS

What are some important things that you can learn from Prateek's story?

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What about positive and negative footprints? What do you remember of those?

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Why is it important to follow social media etiquette?

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List three rules that you must follow before publishing anything on social media.

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2.2 ROLE MODELS

Having a “clean” digital footprint is a good idea but, if your digital footprint is only for show, that does not really help anyone, and it certainly will not help you.

How can you put your best foot forward by being your best self?

Who are your role models? Do you look up to and admire celebrities? Or sports stars?

How about people your own age?



In this video, [let's see how young people like yourself can become role models for each other.](#)

Think!

Experts say that colleges want more than just a student with good grades and impressive test scores – they want someone of high character.

Says Marilyn Hesser, Executive Director of Admission at the University of Richmond in Virginia: *As a residential campus, when we're reviewing candidates, we're just not admitting students for the classroom; we're admitting students to be a part of this community.*

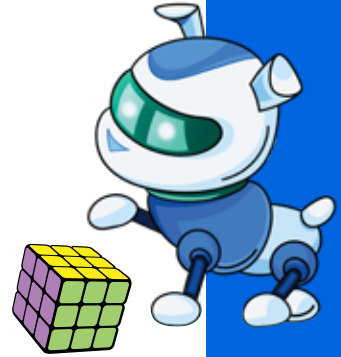


ACTIVITY
TURNING PURPOSE INTO ACTION

In the previous lesson, we spoke about finding your purpose. Let's explore more on how you can turn your purpose into action.



Let's learn about one student who did just that.



? KEY QUESTIONS

What did Marley Dias do to get her project going? What tools did she leverage to help her reach her goal?

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Was it easy for her to achieve her goal?

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How can you similarly leverage social media for good to realize your purpose?

Here are some important tips:

- **Sharpen your focus:** Marley came up with a very specific goal that was easy to quantify. You should be able to easily communicate the problem that you are trying to solve so that others will know what you are working towards.
- **Gather feedback:** Feedback is a critical step in the ideation process. Start sharing your ideas with others and ask for their feedback on what you are planning. Do they have ideas to make it better? Do they know someone who can help you?
- **Connect with others:** Leverage all the tools at your disposal to connect with others and spread your message:
 - Social media
 - Messaging apps or email
 - Create a website
 - Events (community or school events, or create your own events)
 - Contacts from family and friends
- **Start a campaign:** Create a campaign for the cause that you care about, what you are doing to make a change, and how others can get involved.



ACTIVITY

REFLECTION: PREPARING FOR YOUR FUTURE

As you grow older and approach college, university, and employment, your actions take on increased importance. Many schools in India and abroad look for a well-rounded student who can take on the challenges of the 21st century.

Certainly, employers are seeking people who not only have a broad range of skills but who are living a positive lifestyle which reflects their passion and purpose.

Continue working on your plan for your purpose campaign. Write down what your next steps are and when you will accomplish these steps.

Your digital footprint should reflect all the positive aspects of your life.

Take a few minutes to examine and reflect upon your current digital footprint and what it says about you. Write down what actions you would like to take to ensure that in four or five years when someone looks at your social media that they see the real you.

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NOTES

A series of horizontal dotted lines for taking notes.

03. ADDITIONAL RESOURCES



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Lesson 14

**Exploring the
Future of Our
Digital World**

01. OVERVIEW

Technological change is all around us. From the 1960s until today, we have seen a rapid rise in technology-based solutions to problems both big and small. The things that we thought were fantastical 10 or 20 years ago are now becoming realities. In fact, the Apple iPhone, the world's first smartphone, was launched in 2007 and smart phones have now become the norm. If this pace of change continues, where will it take us in the next 50-60 years?

1.1. LEARNING OBJECTIVES

By the end of this lesson, you should be able to:

- Understand the rate of change in the digital world
- Identify new technologies or new applications of technology that are being introduced every year
- Explain the emerging technologies of Extended Reality (XR) and the metaverse
- Brainstorm new inventions which can leverage these technologies to make our lives better

1.2. PRIOR KNOWLEDGE

You should already know:

- The terms 'big data analytics', 'machine learning', and 'algorithms'
- How data is being collected and used to understand customer preferences and develop new products

02. LESSON PLAN

2.1. BACK TO THE FUTURE

ACTIVITY DISCUSSION

Close your eyes for a moment and think about everything you did last evening after reaching home.

Now imagine how your parents or grandparents would have lived. How many of the activities that you did would they have been able to do? How do your parents or grandparents react to the technology that is available to you today?

How many of your devices or activities could you have accessed even five years ago? How much has technology changed just in your lifetime?

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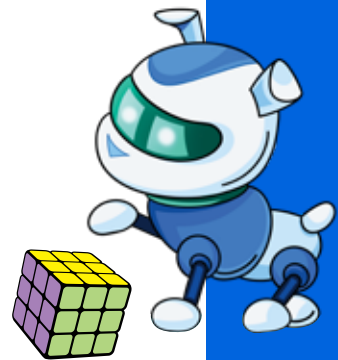
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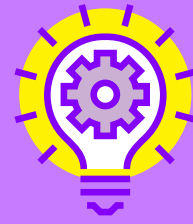


Did You Know?

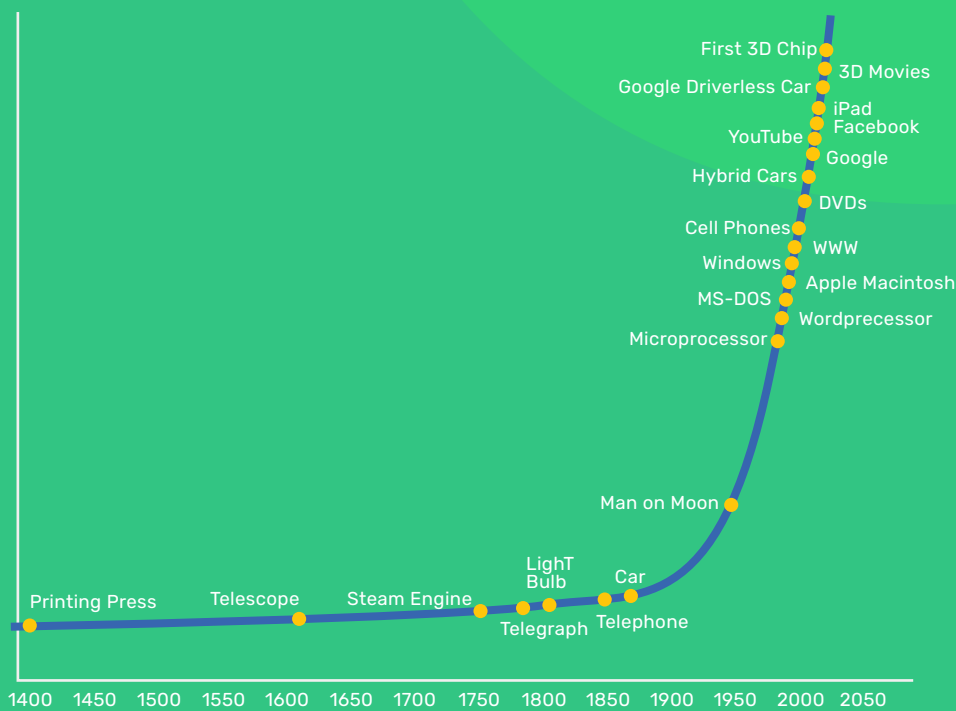
In today's information age, every minute:

- Google users conduct 57,00,000 searches
- YouTube users stream 6,94,000 hours
- WhatsApp users send 4,16,66,667 messages
- Facebook users share 2,40,000 photos
- Facebook Live receives 4,40,00,000 views
- 60,00,000 People shop online
- TikTok users watch 16,70,00,000 videos

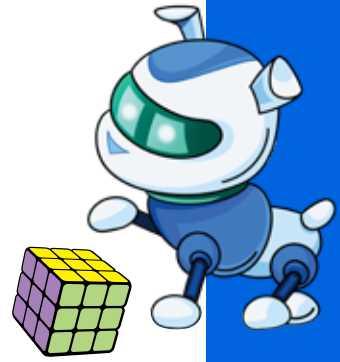
And much more!



Accelerating Growth in Technology



As the chart shows us, technological growth has been accelerating over the last 50-60 years. If the digital world has changed so much in the last 50 years, can you imagine how it will look in the next 50 years?



ACTIVITY THE FUTURE IS NOW!

We are going to explore different use cases which are already changing people's lives.

Language Translation: Examine the below graphic. Can you guess what each bubble says?

Instead of guessing, let's find a way to translate the bubbles.



First let's try Google Translate. Open your browser and go to Google Translate. Ensure that the first language is set to "detect language".

Type in: *Sawubona*.

What did you learn?

While this is an accurate way to translate a word, if you have to do it one by one, it's not that efficient or useful.



Now let's try [Google Lens](#). Download the app on your phone. Point the Google Lens at the picture. What do you find?

How Does It Work?

Google Lens is an AI-powered technology that uses your smartphone camera and deep machine learning not only to detect an object in front of the camera lens, but also to understand it and offer actions such as scanning, translation, shopping, and more.



Healthcare: Technology is enabling incredible advancements to help us fight disease and improve quality of life.



Let's watch an amazing video about how advancements in medical technology are changing lives.



KEY QUESTIONS

How do you feel after watching the video?

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What are some other areas of healthcare which could be improved with the use of technology or big data?

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Did You Know?

An artificial intelligence-powered tool to more accurately predict heart disease risk among Indians and recommend modifiable changes to prevent heart attacks has been launched by Apollo Hospitals in partnership with Microsoft.



Shopping: Think how digital technology has changed the way we shop.



Do you avoid shopping for clothing online because you don't know how those pants will look on you?

KEY QUESTIONS

How do you feel about this technology? What are the pros and cons to shopping this way?

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What other use cases can you envision for this kind of technology?

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How Does It Work?



Also known as virtual fitting technology, this innovation enables consumers to try on garments for size, fit, and style without physically wearing the product. As a camera-equipped device captures the customer, underlying AR technology maps a realistic virtual representation of the product over their real-world image to show how the product would look on the customer's body.

2.3. XR : EXTENDED REALITY AND THE METAVERSE



KEY QUESTIONS

Have you heard the terms AR, VR, MR, or XR before? What do you know about these technologies?

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Have you ever used any of these technologies before?

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Let's see [how these technologies work](#).



Have you heard of the term '[the metaverse](#)'? What do you know about it?

Definitions You Should Know

Augmented Reality (AR)

An enhanced version of the real physical world that is achieved through the use of digital visual elements, sound, or other sensory stimuli delivered via technology.

Virtual Reality (VR)

The use of computer technology to create a simulated environment, usually via head mounted display (HMD).

Mixed Reality (MR)

The use of advanced computer technology, graphics, and input systems to blend physical and digital worlds.

Extended Reality (XR)

A universal term inclusive of immersive learning technologies like virtual reality (VR), augmented reality (AR) and mixed reality (MR).

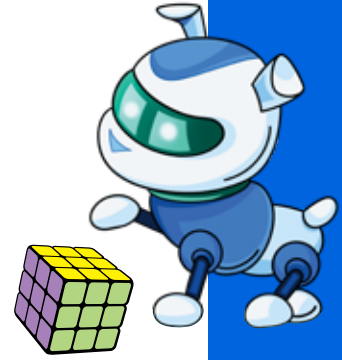
Metaverse

An online space where people can interact in a more immersive way.



ACTIVITY
THINK-PAIR-SHARE

Form pairs or small groups. Using the below questions, brainstorm a list of different use cases for XR or the metaverse. Select 2-3 which you think will be the most useful. Be ready to share your answers with the class.



? KEY QUESTIONS

What were some use cases for AR and VR that you saw in the first video?
Can you think of other use cases for XR?

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What were some of the use cases for the metaverse that you saw in the second video? Can you think of other use cases for the metaverse?

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TAKE-HOME ACTIVITY RESEARCH

Using your list of ideas from the Think-Pair-Share activity, do some research on your own to see whether something similar already exists. You can check to see what is already available or you can see what research or ideas are being explored along similar lines to what you were thinking.





NOTES

A series of 35 horizontal dotted lines for writing notes.

03. ADDITIONAL RESOURCES



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4. Article | [“Augmented Reality”](#), Adam Hayes, Investopedia, 2 December, 2020



5. Article | [“What is Virtual Reality”](#), Joe Bardi, 3D Cloud Marxent, 26 March, 2019.



Lesson 15

**Exploring
Digital
Careers**

01. OVERVIEW

Although college, university, or a job may seem far away, the reality is that you should start planning for those events now. The digital future offers many exciting and challenging opportunities and as technology continues to change, new opportunities will emerge. In this lesson, we will learn about technology career trends. You will close the lesson by identifying your skills and talents against which you can start to think about your own future.

1.1 LEARNING OBJECTIVES

By the end of this lesson, you should be able to:

- Explain which types of jobs will be replaced by robotics and which jobs and skills will still be needed
- Explain how consumer good companies will use AI to anticipate customer needs before an order is placed
- State the differences between a data analyst and a business analyst and which skills are needed for each of these roles
- Enumerate the different types of roles that are needed in cybersecurity
- Reflect on your skills and talents and what kind of job or career you might be interested in when you are older

1.2 PRIOR KNOWLEDGE

You should already know:

- The basics of big data and machine learning
- The definition of a 'white hat hacker' and what it means to be an ethical hacker
- Emerging technology trends as discussed in the previous lesson

02. LESSON PLAN

2.1 WHAT WILL THE JOBS OF THE FUTURE LOOK LIKE?

Have you ever thought about what kind of job or career you wish to pursue after school?

Now that you have been more exposed to the online world and become a digital citizen, you might have realized that there are many kinds of digital jobs today and in the future.

You might have seen some videos about how humans will no longer be needed in the work force but, is that true?



Let's watch to see [if robots will take our jobs.](#)

? KEY QUESTIONS

In the video, Elon Musk is seen saying that robots will be able to do everything better than humans. What do you think?

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What kinds of jobs will be easier for robots to do?

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What are the advantages of using robots for these jobs?

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The video makes the argument that jobs will be created due to robot automation in certain industries. What kinds of jobs will be needed that robots can't do?

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What are the skills that you think these non-automated jobs will require?

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2.2 THE FUTURE OF BIG DATA ANALYTICS

In early lessons, we learned about machine learning and big data analytics. These are two areas which will continue to be important in the coming years.

How might data analytics be used in the future?



Let's hear from a futurist who is looking at [how AI will change the future](#).





KEY QUESTIONS

What was the example of the use of big data shared in the video?

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What are the advantages for a company like Amazon in using this anticipatory ordering process? Are there other businesses or companies you can think of that can take advantage of this technology?

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Do you think that this is a good use of data analytics? How do you feel about online shopping sites anticipating your shopping needs? Is that a good thing or a bad thing?

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In addition to programming and coding skills, what other kinds of skills do you think will be needed to take advantage of these new uses of data?



Let's learn the [difference between a business analyst and a data analyst](#) to see how two different roles work together in data analysis.

What did you learn about each of these roles? Make a few notes in the table below.

Business Analyst	Data Analyst

? KEY QUESTION

Of all the different kinds of careers that we have seen mentioned in data analytics, which sound interesting to you? Why?

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2.3 CYBERSECURITY CAREERS

Another subject that you have learned a lot about is cybersecurity. Do you remember the role of the ethical white hat hacker? Did you know that there are many different roles in cybersecurity beyond being a hacker?



Let see what kinds of roles are possible in cybersecurity.

? KEY QUESTIONS

Are you surprised that there are so many different roles in the world of cybersecurity? Do you remember the various roles?

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When you learn about cybersecurity, what kind of organizations do you think that you would work in? While there are cybersecurity-specific companies, there are also companies that have cybersecurity as a branch of their whole organization. Can you think of any examples?

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ACTIVITY

WHAT DOES YOUR FUTURE LOOK LIKE?

This lesson has offered a glimpse of different career paths based in the digital world. This is just a small window into the different paths that you might be interested in as you continue through school and learn more.

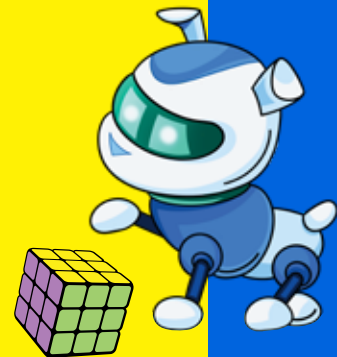
An important factor to consider when you are choosing your course work over the next few years is how this course work ties not only into various career paths but into your skills and interests as well. What kinds of classes should you take now to be ready for the digital jobs of tomorrow?

Take a few minutes to consider **one or two potential jobs** that sound interesting to you. These can be digital jobs or any other type of job that you would like to learn more about.

Fill in the KWL template.

Take your time to fill out the template and do some research. Use what you learn to have a discussion with an adult in your life—a parent, a family member, or a teacher.

Good luck!



What I Know (K)	What I Would Like to Know (W)	What I Learned (L)



NOTES

A series of horizontal dotted lines for writing notes.

03. ADDITIONAL RESOURCES



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Lesson 16
**Group
Project**

01. OVERVIEW

This Skills course is almost complete. The final 3 class periods will be used for you to work on and complete your group projects. First, we will conduct a short knowledge check followed by the group project brief. The group project will count for 20 points of the final evaluation for this Skills course.

1.1 LEARNING OBJECTIVES

By the end of this lesson, you should be able to:

- Develop and implement a campaign for good in your local community or in your school

1.2 PRIOR KNOWLEDGE

You should already know:

- What project for good (Lessons 12 and 13) interests you
- What you see as a need—something that makes you mad and that you would like to fix
- What your skills and interests are that can contribute to a campaign for good

02. LESSON PLAN

ACTIVITY KNOWLEDGE CHECK

Test what you have learned and what you remember from all the lessons we have covered so far.



Take this [Level 3 knowledge check quiz on Quizzizz](#).



ACTIVITY GROUP PROJECT

In your groups, review each person's idea for your 'campaign for good' which you developed in Lessons 12 and 13. Select one of these ideas for your group project.

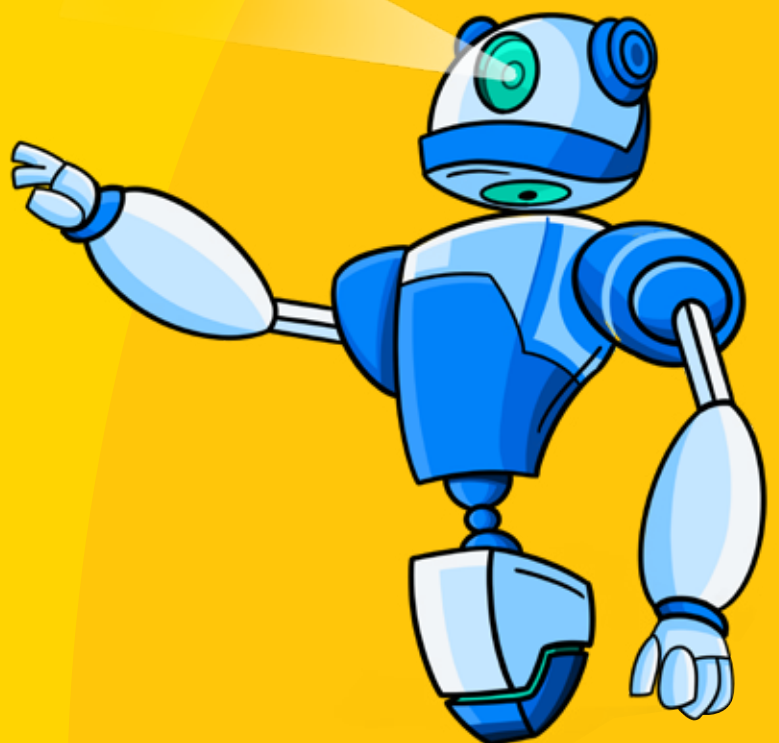
Remember that your purpose should be aligned to your skills and what you love to do. Poll the members of your group to uncover all the skills and passions within your group that you can leverage for your campaign for good.

Refer to the section in Lesson 13 titled: *Turning Purpose into Action*. Read through the important tips to understand the approach you need to take to launch your campaign.

Work together to develop and launch the campaign either in your school, in your community, or on social media. Your focus should be on finding a cause for good which the group can rally behind and implement.

Here are some examples:

- Teach the students in the lower grades about an important topic such as recycling, water conservation, digital citizenship, etc.
- Help the school's support staff with a donation drive, an education session on a specific topic like digital citizenship or menstrual health, run a signup drive for medical insurance, etc.
- Work with the school administration on a project to improve the school such as a cleanup campaign, an anti-bullying campaign, a water conservation campaign, community kitchen, etc.
- Present a play to the students or parents on an important topic such as gender inequality, importance of education, digital citizenship, etc.





NOTES

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Level 3

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	Avantika Yadav	Jaypee Public School, Noida
	Harmeet Kaur	K R Mangalam Global School, Delhi
	Naveen Gupta	St Marks Senior Secondary School
	Neeru Mittal	SR DAV Public School, Delhi
	Neha Sharma	GD Goenka Public School, Ghaziabad
	Nidhi Tiwari	Ridge Valley School, Gurugram
	Rani Kumari	DLF Public School, Ghaziabad
	Seema Jerath	DLF Public School, Ghaziabad
	Shelly Batra	Mt Carmel School, Dwarka
	Swati Sharma	Heritage Xperiential Learning School, Gurugram
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	Smita Sahu	Shakuntala Vidyalaya, Ramnagar, Chhattisgarh
	Ishwar Khakare	Oxford International School, Nanded, Maharashtra
	Gayatri Naidu	Delhi Public School, Chhindwara, Maharashtra
	Aparna Mathur	Nath Valley School, Aurangabad
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NOTES

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Digital Nagrik is a campaign led by teachers, managed by 1M1B, and supported by Meta Platforms Inc. The campaign is a part of Meta's Digital Suraksha initiative for a safer and inclusive internet.