



The CENTRE for EDUCATION
in MATHEMATICS and COMPUTING

Smartphone Addiction

*A CS and Society resource addressing
social and cultural issues within the realm
of digital technology and computing*

This resource will:

- explore the causes and signs of smartphone addiction, and
- encourage reflection on your smartphone usage and provide strategies for building a healthier relationship with your device.

Screen Time: Reality Check

1

Write down how much time you *think* you spend on your phone each day.

Access the **Screen Time** feature of your phone. This is usually found in the **Settings** app. Discover your *actual* daily average.

2

3

Share your findings with the class.

- Did you underestimate, or overestimate, your usage?
- What was the most surprising statistic you discovered about how much time you spend on your phone each day?



Smartphone Dependency

A report released in 2023 by Common Sense Media included the following findings:

- Teens spend approximately 4.5 hours on their smartphones each day.
- 50% of teens use their phones between midnight and 5 a.m. on weeknights.
- Teens receive a median of 237 notifications in a single day.

According to a 2024 report from Statistics Canada, 88% of people aged 15 to 34 use their phones at least once per hour.

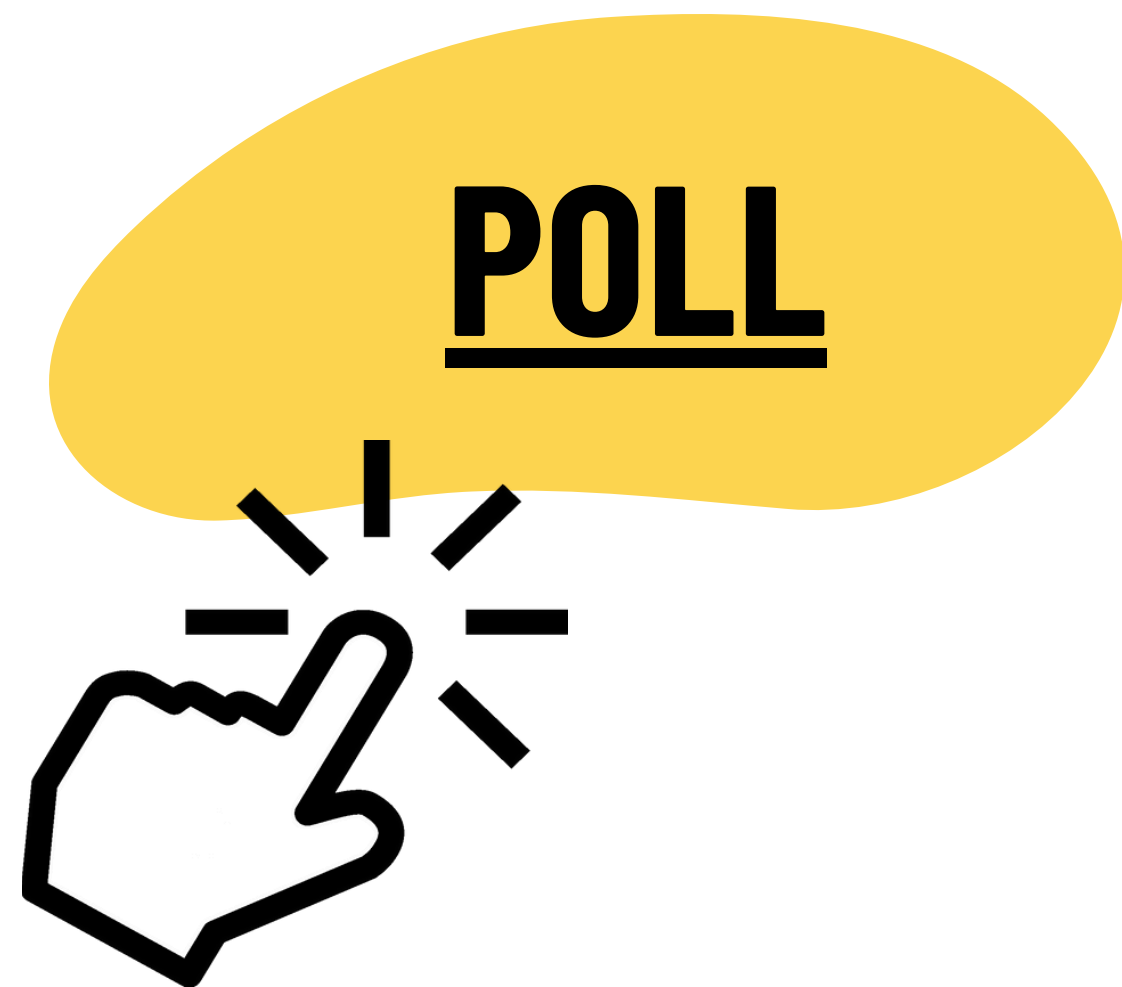
Nomophobia

The fear of having no mobile device, or being unable to use a device due to the absence of a signal or a low battery charge.



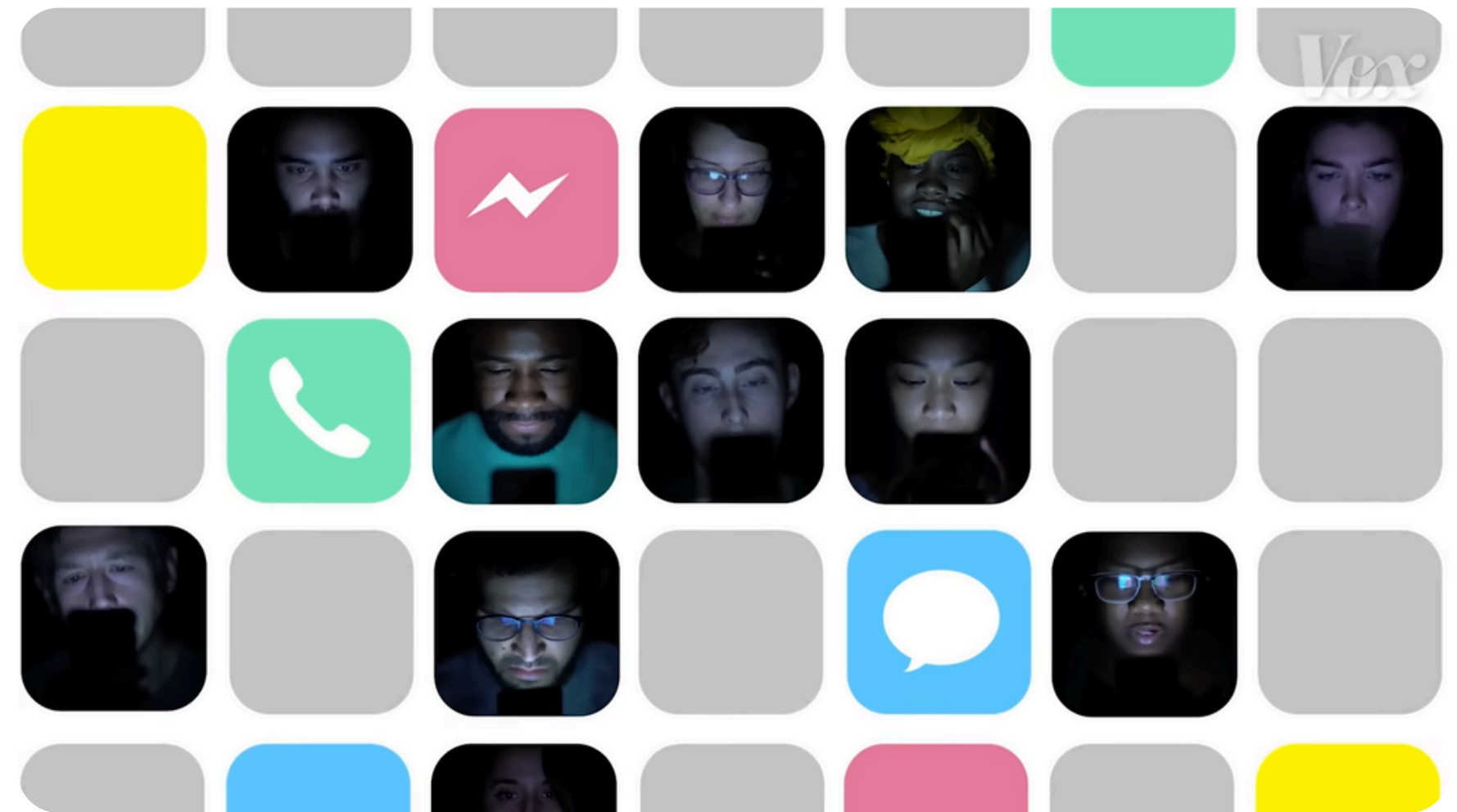
How Attached Are You?

How can you tell if you are addicted to your smartphone? There are five key questions to ask yourself.



Designed To Be Addicting

The following video explains how smartphone apps are designed to keep us engaged for extended periods of time. After watching the video, complete the worksheet found under [additional materials](#).

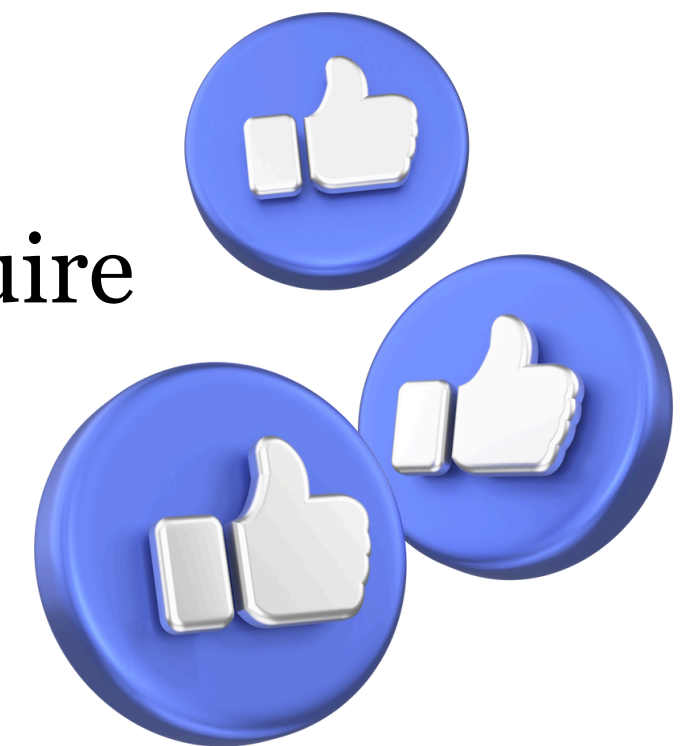
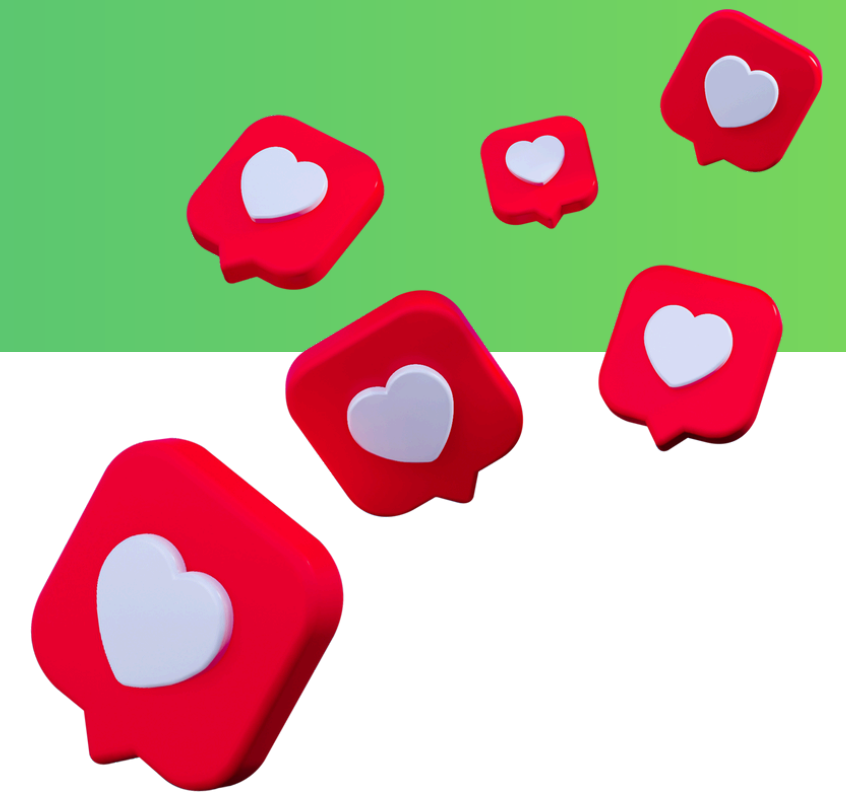


Dopamine

Dopamine is a chemical released in our brain whenever we are doing something pleasurable.

Notifications and other app interactions trigger dopamine release. This, in turn, makes us feel good and so we are encouraged to return to our devices often.

Over time, our brain becomes accustomed to higher levels of dopamine, leading to an increased tolerance. This means we require more stimuli to achieve the same feelings of pleasure that we experienced in the past.



Dopamine: Healthier Sources

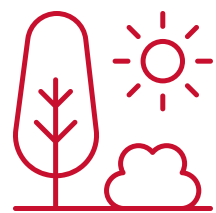
Instead of relying on our smartphones for instant gratification, there are healthier ways to obtain a more sustainable and balanced sense of reward.



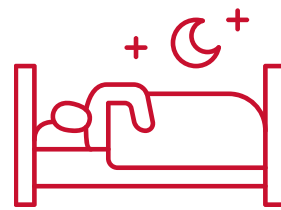
Physical activity releases endorphins and dopamine, which boost our mood and our motivation while also improving our overall health.



Spending time with **friends and family** helps foster deeper relationships and creates meaningful connections.



Being in **sunlight and nature** increases dopamine levels and reduces stress, promoting mental well-being.



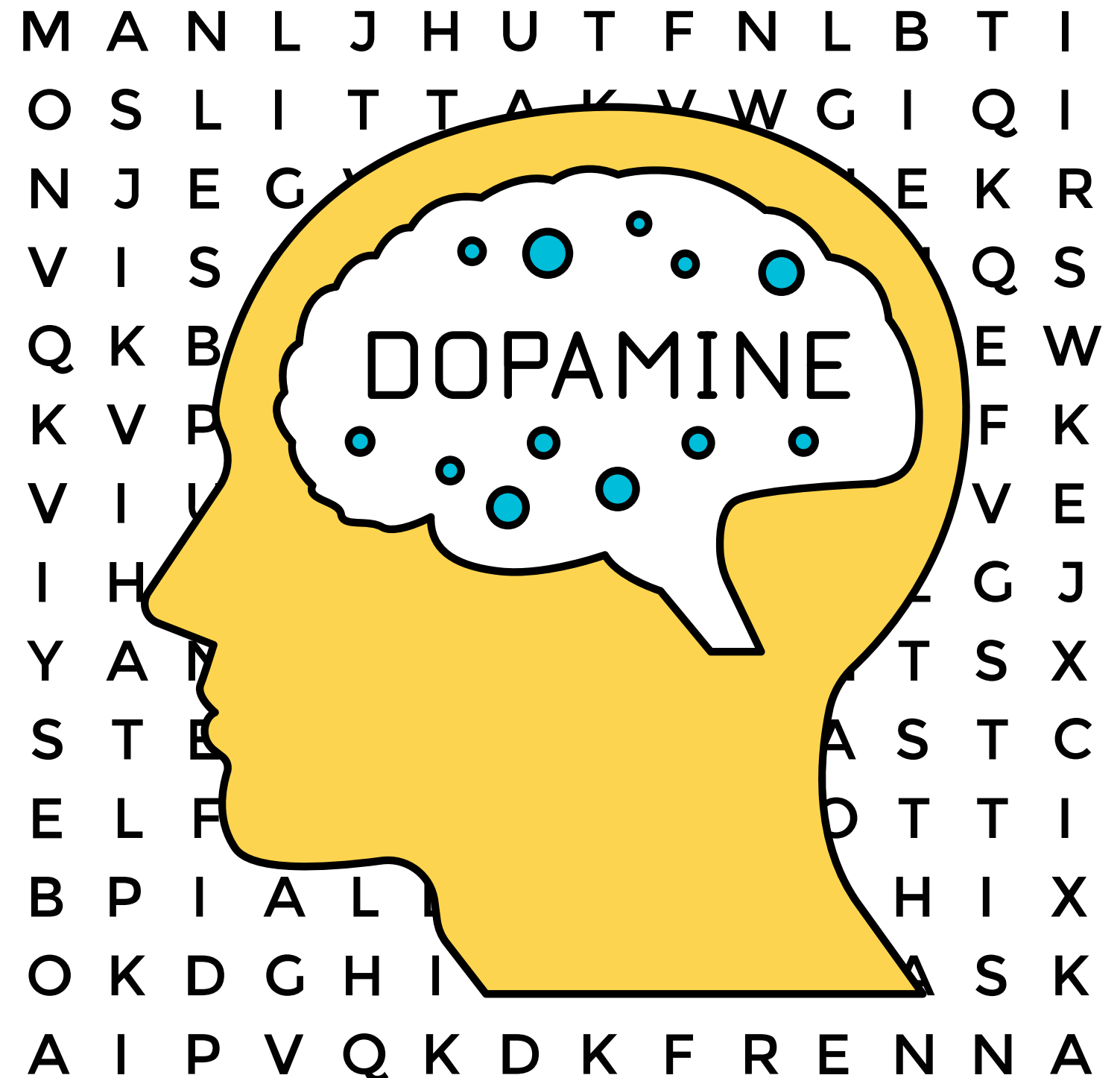
Getting proper **rest** enhances the sensitivity of dopamine receptors, making natural rewards more satisfying.



Dopamine: Healthier Sources Continued

Completing a challenge or solving a puzzle also triggers a dopamine surge in our brain.

See how many other dopamine inducing activities you can find hidden in our wordsearch, located under [additional materials](#).



Evaluating Smartphones

As a class, compile a list of

- the positive impacts smartphones can have on people, and
- the negative ways that smartphones can affect individuals.



ARTICLE



Refer to this article from The Centre for Addiction and Mental Health (CAMH) for further insights and to supplement your lists.



Healthy Screens

Researchers from the University of Toronto, Harvard University, and McGill University created a resource called **Healthy Screens**. This tool introduces the idea of *nudges*, small changes that can reduce smartphone usage.



- Select one of the ten listed strategies.
- Implement this strategy for one week.
- After one week has passed, pair up with someone who chose a different strategy and take turns interviewing each other about how the week went.



Healthy Screens: Interview Questions

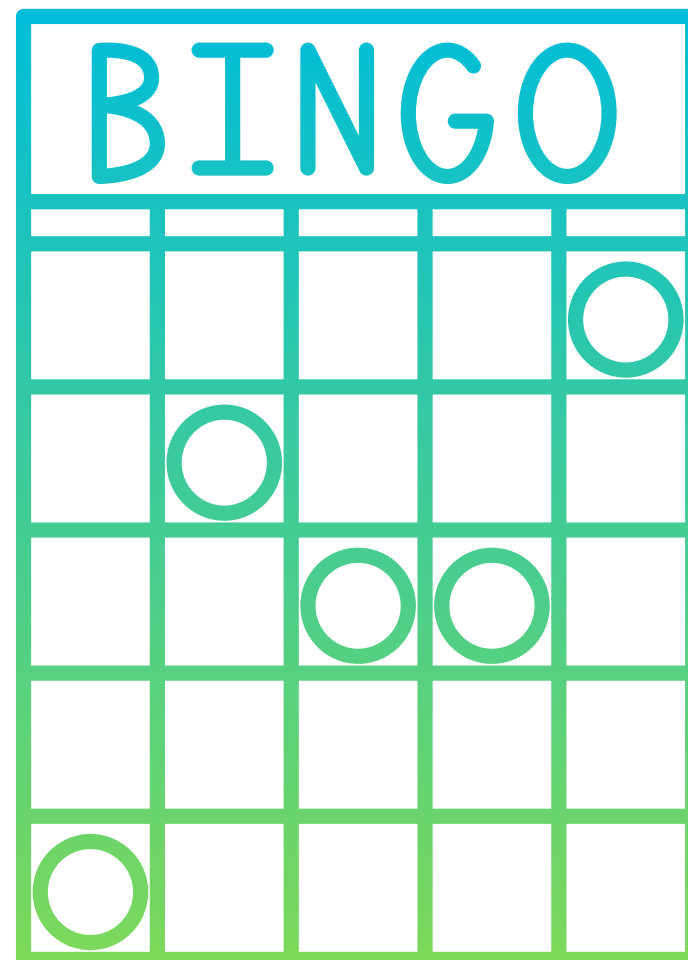


1. Which strategy did you choose and why?
2. How easy or how hard was it to get started?
3. Were you able to use this strategy for the entire week? If not, why not?
4. What challenges did you encounter throughout the week?
5. What benefits did you encounter throughout the week?
6. Did this strategy have an impact on your smartphone usage? In what ways?
7. Will you continue to use this strategy long term? Why or why not?



Digital Detox BINGO

There are many ways to establish a healthier relationship with your smartphone. Consider trying some of the activities found on the Digital Detox BINGO card located under additional materials.



Mark off each activity you successfully complete.



Challenge yourself to complete a line, or consider going for the full card.



More Information and Resources

Articles:

[The Centre for Addiction and Mental Health \(CAMH\)](#)

[Pew Research Center](#)

[Common Sense Media](#)

[Statistics Canada](#)

Videos:

[Washington Post](#)

[Learn Free](#)

[ABC News](#)

Tools:

[Android: Digital Wellbeing](#)

[iOS: Screen Time](#)

[Clearspace](#)

[One Sec](#)



Additional Materials

1

How do apps use push notifications to keep you engaged?

2

Why is infinite scrolling an effective way to keep you on an app?

3

In what ways are smartphone apps similar to slot machines?

4

Describe one change you could make to your phone in order to reduce your temptation to engage with it.

5

What part of the video could you relate to the most?

6

What things are important enough for your phone to interrupt you?

1

How do apps use push notifications to keep you engaged?

Push notifications are designed to grab your attention and they mimic genuine social interactions. This prompts you to open apps more frequently.

2

Why is infinite scrolling an effective way to keep you on an app?

Infinite scrolling eliminates any natural stopping point, so you continue scrolling without realizing how much time has passed.

3

In what ways are smartphone apps similar to slot machines?

The unpredictability of notifications triggers curiosity. You don't know whether the next one will be positive, negative, or neutral. "Pull to refresh" is just like pulling a slot machine handle.

4

Describe one change you could make to your phone in order to reduce your temptation to engage with it.

Turn off or bundle notifications, use a grayscale screen, restrict your home screen apps ...

5

What part of the video could you relate to the most?

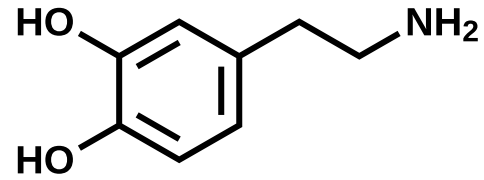
Answers will vary.

6

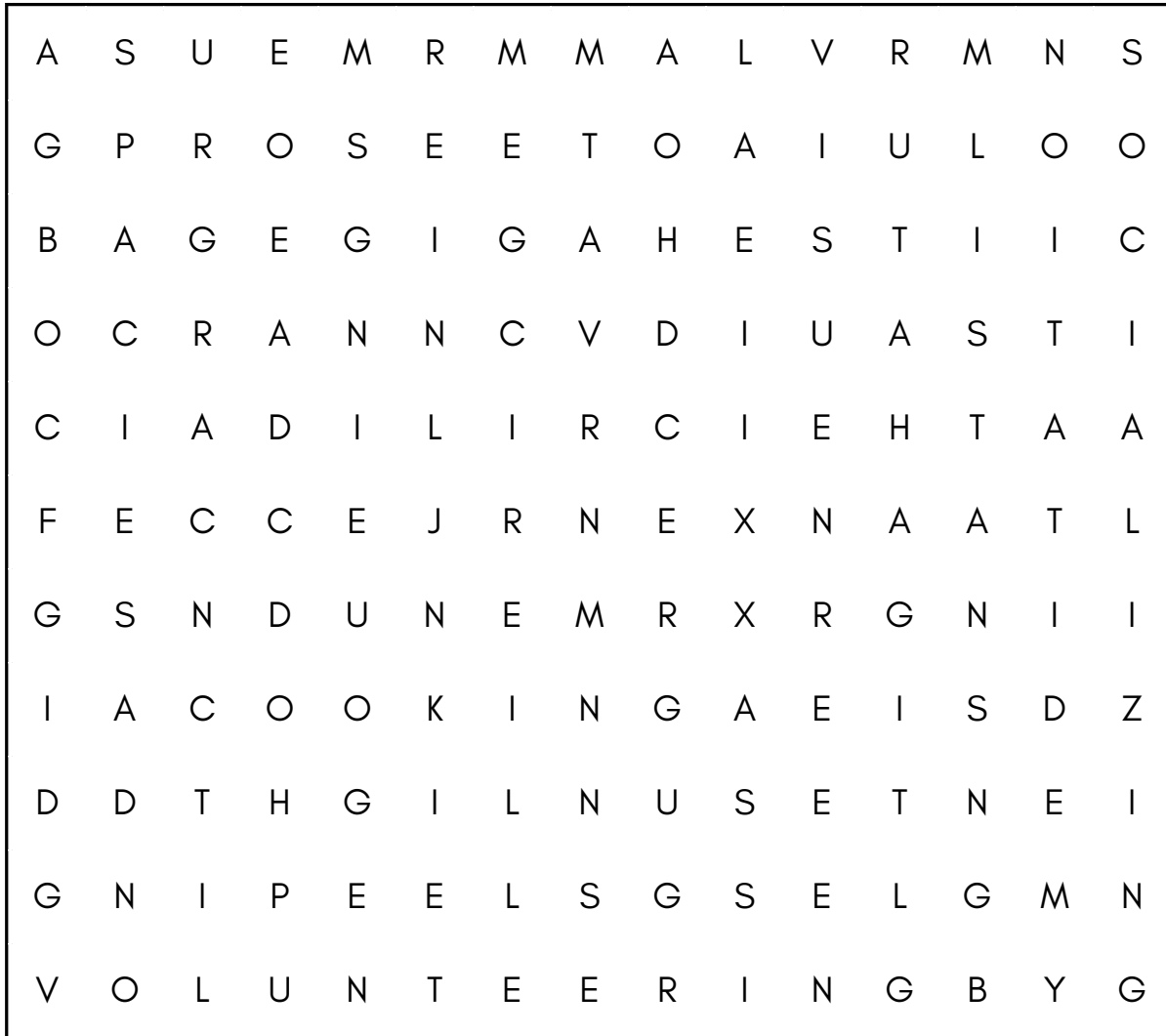
What things are important enough for your phone to interrupt you?

Answers will vary.

Healthy Sources Of Dopamine

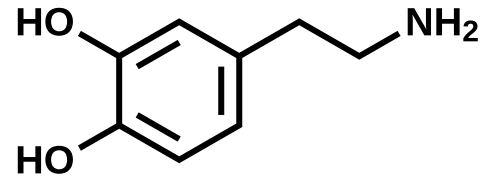


How many dopamine inducing activities can you find hidden in this wordsearch?

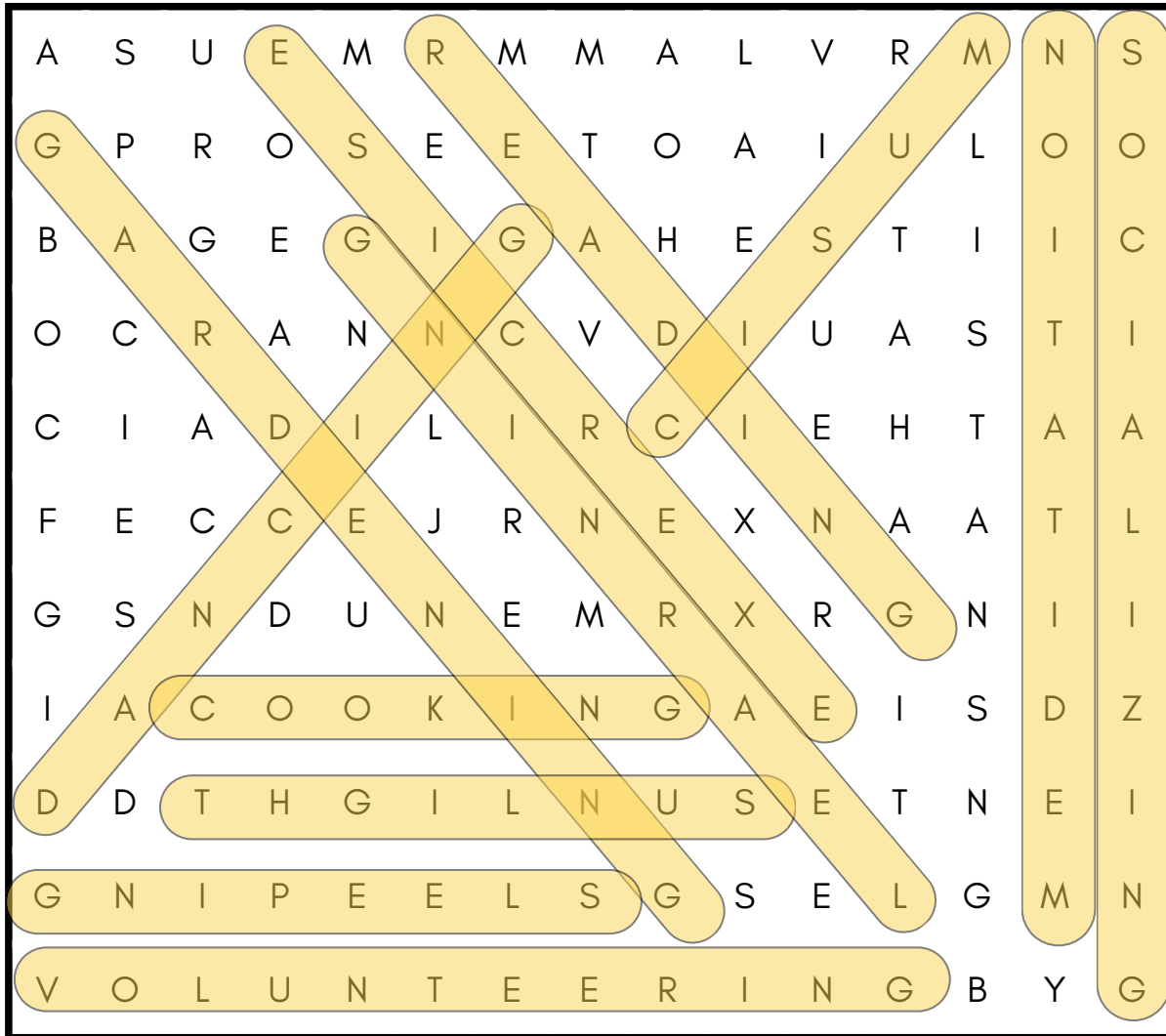


- EXERCISE
- GARDENING
- READING
- MEDITATION
- (listening to) MUSIC
- SOCIALIZING
- DANCING
- SLEEPING (well)
- (being in) SUNLIGHT
- COOKING
- VOLUNTEERING
- LEARNING (new skills)

Healthy Sources Of Dopamine



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DIGITAL DETOX BINGO

prune your
digital friends
list

have a
phone-free
meal

go for a walk
outside
without your
phone

turn off
notifications
for 24 hours

set your
phone to
silent for 1
hour

delete a rarely
used app

go phone-free
for the last
hour before
bed

set your
phone screen
to grayscale

go phone-free
for the first
hour of the
day

make your
phone harder
to unlock

log out of your
social media
apps

put your
phone in
airplane
mode for 1
hour

spend 1 hour
doing a tech-
free activity
you enjoy

stay off of
social media
for a whole
day

send less than
5 messages in
a day

move apps off
of your home
screen