Unit 9 · You and Your Screen

WORKSHEET

Full marks 32

Name _____ Class _____ Roll no. ____ Date _____ Marks _____ / 32

1 Key words [4]

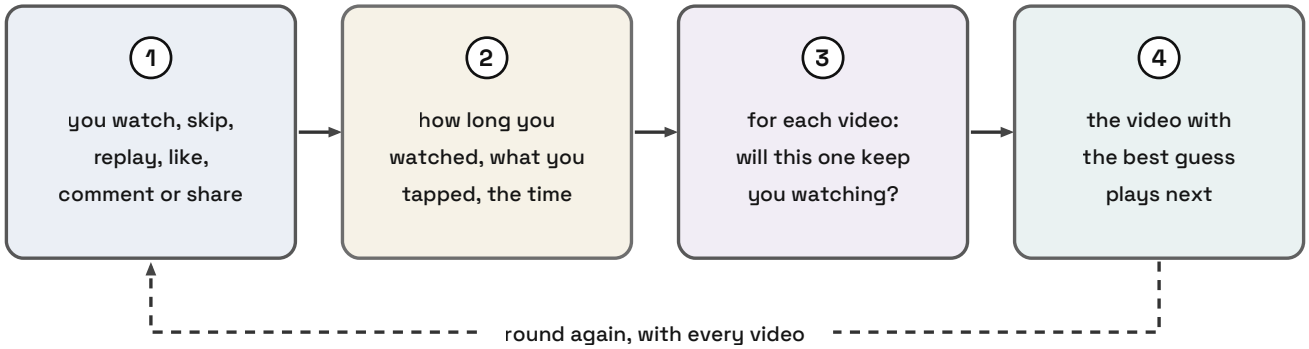
Fill in the blanks with words from the box. Two words in the box are not needed. Each blank carries 0.5 mark.

attention economy	**digital footprint**	**filter bubble**	**infinite scroll**	**metadata**
recommendation system	**streak**	**surge pricing**	**upstander**	**variable reward**

Businesses competing for the hours of your day, often to show you ads, are called the _____. A feed that loads more posts each time you reach the bottom, so that it never ends, is an _____. A reward that comes at times you can't predict, like pulling down to refresh, is a _____. A program that chooses what to show each person, from what it has learned about them, is a _____. Data about other data, such as when and where you watched a video, is _____. When a person sees mostly things that match what they already watch or believe, and little else, it is a _____. The trail of data you leave online is your _____. A person who sees cyberbullying and does something to help is an _____.

2 Label the diagram [2]

The diagram shows a recommendation system's loop. In place of 1 to 4, write in two or three words what happens at each step. Each carries 0.5 mark.



1. _____ 2. _____

3. _____ 4. _____

3 Multiple choice [5]

Choose the correct option for each of the following questions.

i. Why do most free social media and video apps want you to stay on them as long as possible? [1]

a. Because they are paid by your phone company for each minute
b. Because they earn money from ads, and the longer you stay, the more ads you see
c. Because a law says apps must keep people busy
d. Because it makes your phone's battery last longer

ii. After a video ends, the next one starts by itself in five seconds. Which design idea is this? [1]

a. a variable reward
b. a streak
c. autoplay: carrying on is what happens if you do nothing
d. a notification

iii. What makes an algorithm **unfair**, rather than only making a mistake? [1]

a. It sometimes gets an answer wrong.
b. It was made by a big company.
c. It works worse for some groups of people than for others, through no fault of their own.
d. It is slower than a person.

iv. Which is the **strongest** evidence that a map app's routes are worse in villages than in cities? [1]

a. The company's advertisement says its maps are the best in the world.
b. Your cousin says he doesn't like the app.
c. You and your classmates test the same app on ten trips in the village and ten in town, and write down how often its route was wrong.
d. A video with many likes says all maps are bad.

v. In a class group, someone posts a mean edited photo of a classmate. Ten people send laughing emojis. You think it is cruel. Which response is an **upstander**'s? [1]

a. Send a laughing emoji so you fit in.
b. Forward it to your cousin to ask what she thinks.
c. Don't react; message the classmate privately, report the post and tell a teacher.
d. Leave the group without telling anyone.

4 True or false [3]

Write True or False after each sentence.

i. Most free social media and video apps earn their money from ads. ☐

ii. A recommendation system learns most about you from the age you typed when you joined. ☐

iii. The designers choose what a recommendation system is trying to get. ☐

iv. Eye doctors recommend blue-light-blocking glasses for computer use. ☐

v. The videos you watched and the searches you made are part of your passive digital footprint. ☐

vi. Deleting a photo you posted removes every copy of it. ☐

5 Calculations [6]

Show your working.

a. Nima scrolls short videos for 45 minutes every day. How many minutes is that in a year of 365 days? How many hours? How many whole days? [3]

Answer: _____

b. Asha is 13. She gets up at 5:45 am for school. She needs at least 8 hours of sleep, and it takes her about 15 minutes to fall asleep. By what time must she be asleep? When should she be in bed? When should her screens go off, as children's doctors advise? [3]

Answer: _____

6 Short answers [6]

Write short answers to the following questions.

a. What is a filter bubble? Give two ways a student can stop their feed narrowing into one. [3]

b. A phone's photos store metadata. What might a photo's metadata reveal, and why could that be dangerous? What can you do about it? [3]

7 Long answer [4]

Write a long answer to the following question.

An app's designers decide that videos in the feed start playing in high quality as soon as they appear. Evaluate this decision: who gains, who pays, and how would you change it to be fairer?

8 Think [2]

Think, then answer.

Your friend says, "I only watch what I want to watch." Is that true on a short-video app? Explain.

9 Activity: Three days of screen time (not marked)

Keep this diary for three days. Use your phone's screen-time page, or, if you have no phone of your own, write your honest guess. Then answer: which app took the most time, and at what time of day?

	Day 1	Day 2	Day 3
Total screen time			
The app used most			
Times the phone was picked up			
Notifications that came			
Time you fell asleep, and woke up			