The importance of sleep

Lesson 2

My relationship with sleep

PLANET Youth®

PARTNER Ireland

Lesson introduction

Learning goals

By the end of the lesson, we will:

- Better **understand** the science of sleep
- Be able to **identify** some common sleep problems
- Better **understand** our own relationship with sleep.
- Be ready to **practice** personal sleep analysis
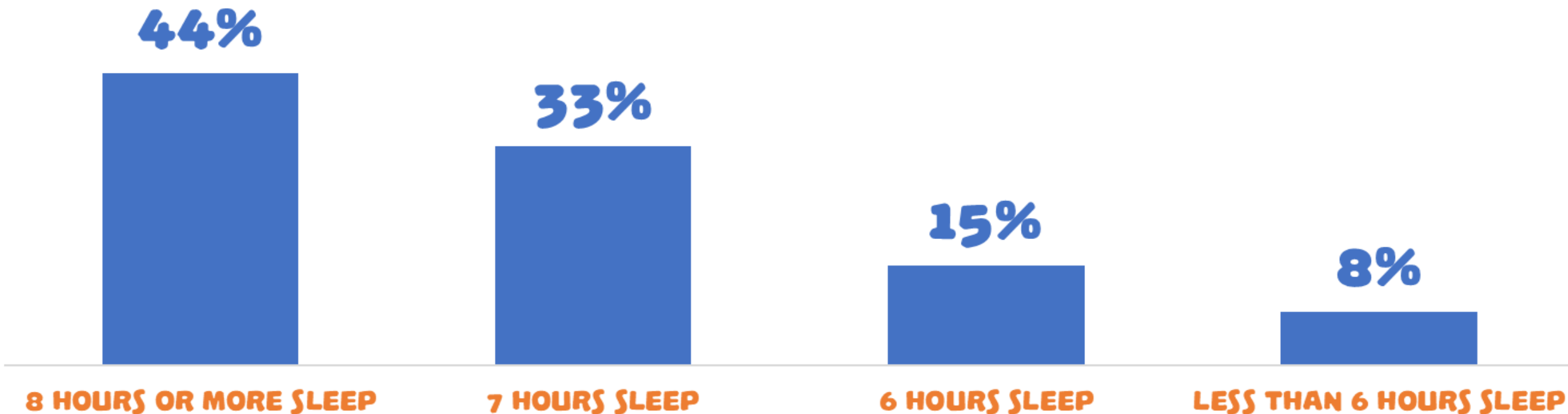
Wellbeing indicators

RESPONSIBLE

RESILIENT

CONNECTED

RESPECTED

AWARE

HOW MUCH SLEEP ARE TEENS GETTING?

4,339 15 AND 16 YEAR OLDS IN ROSCOMMON, MAYO AND GALWAY

**44%** 8 HOURS OR MORE SLEEP

33% 7 HOURS SLEEP

15% 6 HOURS SLEEP

8% LESS THAN 6 HOURS SLEEP

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Sleep questionnaire worksheet

SLEEP QUESTIONNAIRE

What time do you usually go to bed on a school night?	☐ 21:30	☐ 22:00	☐ 22:30	☐ 23:00	☐ 23:30	☐ 00:00	☐ After Midnight
How long does it usually take you to fall asleep once you are in bed?	☐ Less than 15 min	☐ 15-30 min		☐ 31-45 min		☐ 46-60 min	☐ More than an hour
So what time do you usually get to sleep on a school night?							
What time do you usually get up on a school day?	☐ Before 06:30	☐ 06:30	☐ 06:45	☐ 07:00	☐ 07:15	☐ 07.30	☐ 07:45	☐ 08:00
So how many hours of sleep do you usually get on a school night?							
How would you rate your quality of sleep?	☐ Very poor	☐ Poor		☐ Average		☐ Good	☐ Very good
How often do you feel sleepy in the daytime?	☐ Never	☐ Rarely		☐ Sometimes		☐ Often	☐ Always
How many nights a week do you think you get poor sleep?	☐ 0 nights	☐ 1 night	☐ 2 nights	☐ 3 nights	☐ 4 nights	☐ 5 nights	☐ 6 nights	☐ 7 nights

Which of the following activities do you usually do in the hour before you go to sleep? (You can tick more than one)

☐ Have something to eat	☐ Play games on a screen	☐ Have something to drink	☐ Use your phone for watching videos	☐ Use your phone for social media
☐ Do schoolwork	☐ Read a book	☐ Do some exercise	☐ Relax or meditate	☐ Watch TV
☐ Talk to friends	☐ Bath or shower	☐ Other _____		

Sleep tracker images – Discussion
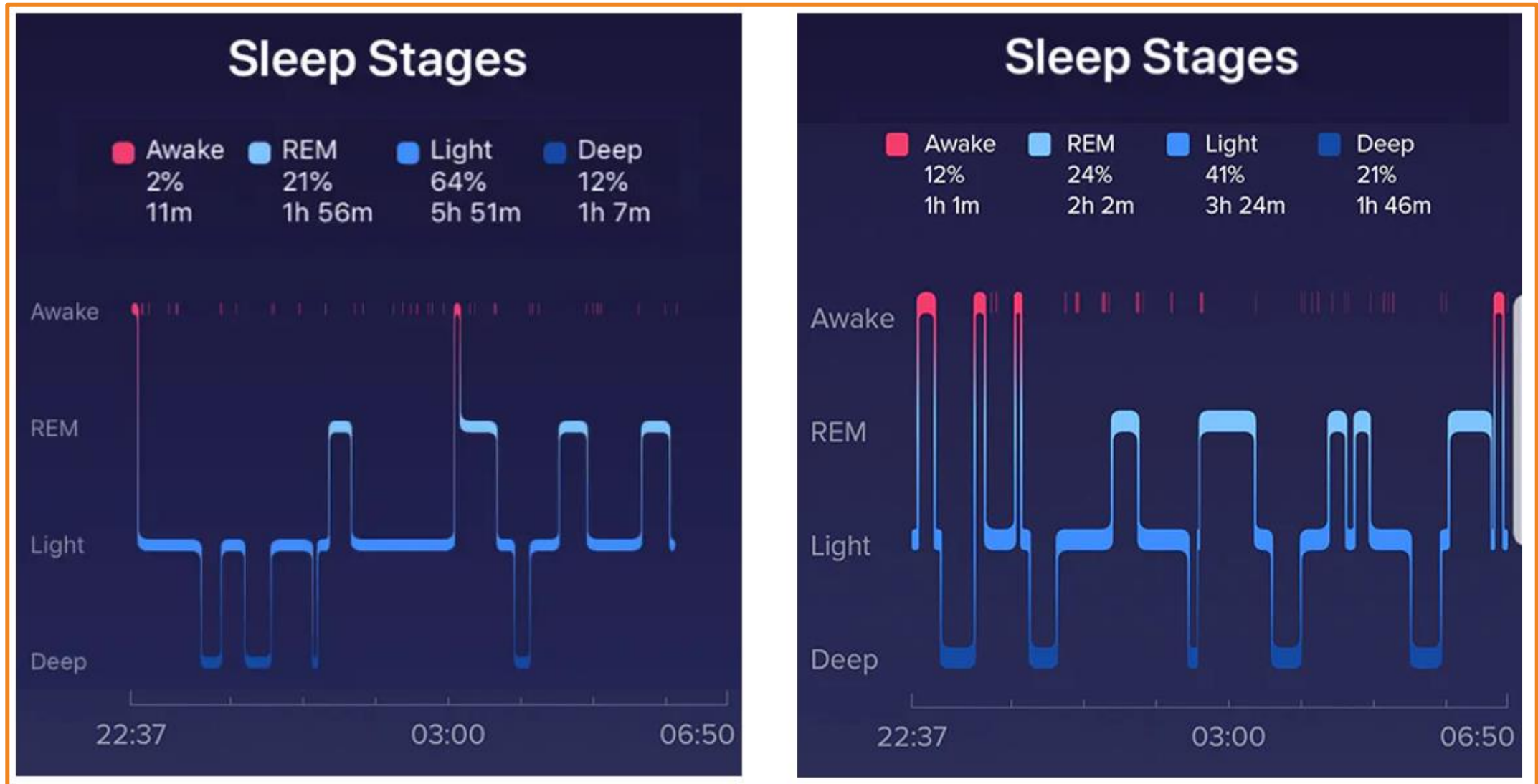
The science of sleep

The two processes that regulate sleep

The homeostatic sleep drive

This is the body's self-regulating system in which pressure to sleep builds up based on how long you've been awake. This same drive causes you to sleep longer or more deeply after a period of insufficient sleep.

The circadian rhythm and internal clock

These control your timing of sleep and cause you to be sleepy at night and to wake in the morning. Your body's internal or biological clock, which is based on a roughly 24-hour day, controls most circadian rhythms. These include sleep and wake times but also things such as brain activity, the release of hormones, body temperature and appetite. Daylight exposure is the biggest influence on circadian rhythms.

The science of sleep

The stages of sleep

NREM Sleep – Non Rapid Eye Movement

Stage 1 - Eyes closed on the threshold between awake and asleep. You can be easily awakened
Stage 2 - This is light sleep; your heart rate begins to slow and body tempearture goes down.
Stage 3 - Slow wave sleep, now you are in deep sleep. Blood pressure and heart rate go down, and your breathing slows. It is harder to wake you up. A lot of deep sleep happens in the first part of the night.

REM Sleep – Rapid Eye Movement

Stage 4 - Approximately 90 minutes after falling asleep, your brain becomes active, but voluntary muscle movements are inhibited. Brain waves are faster and less organized that in NREM and the eyes scan back and forth under the eyelids. Although dreams can happen during any stage, the most intense dreaming takes place during REM sleep. As the night progresses you experience more REM sleep.

The science of sleep

Sleep cycles

Throughout your time asleep, your brain will cycle through the NREM and REM stages of sleep approximately every 90 minutes. From drowsiness, to light sleep and dream sleep, and into more deep sleep again. Four to six sleep cycles every night is about normal.

All these stages of sleep are necessary, and none is better than any other. It is understood though that you need a balance of around 25% of REM sleep and 25% of the deepest NREM sleep to maintain your health and wellbeing.

Sleep tracker images - revisited
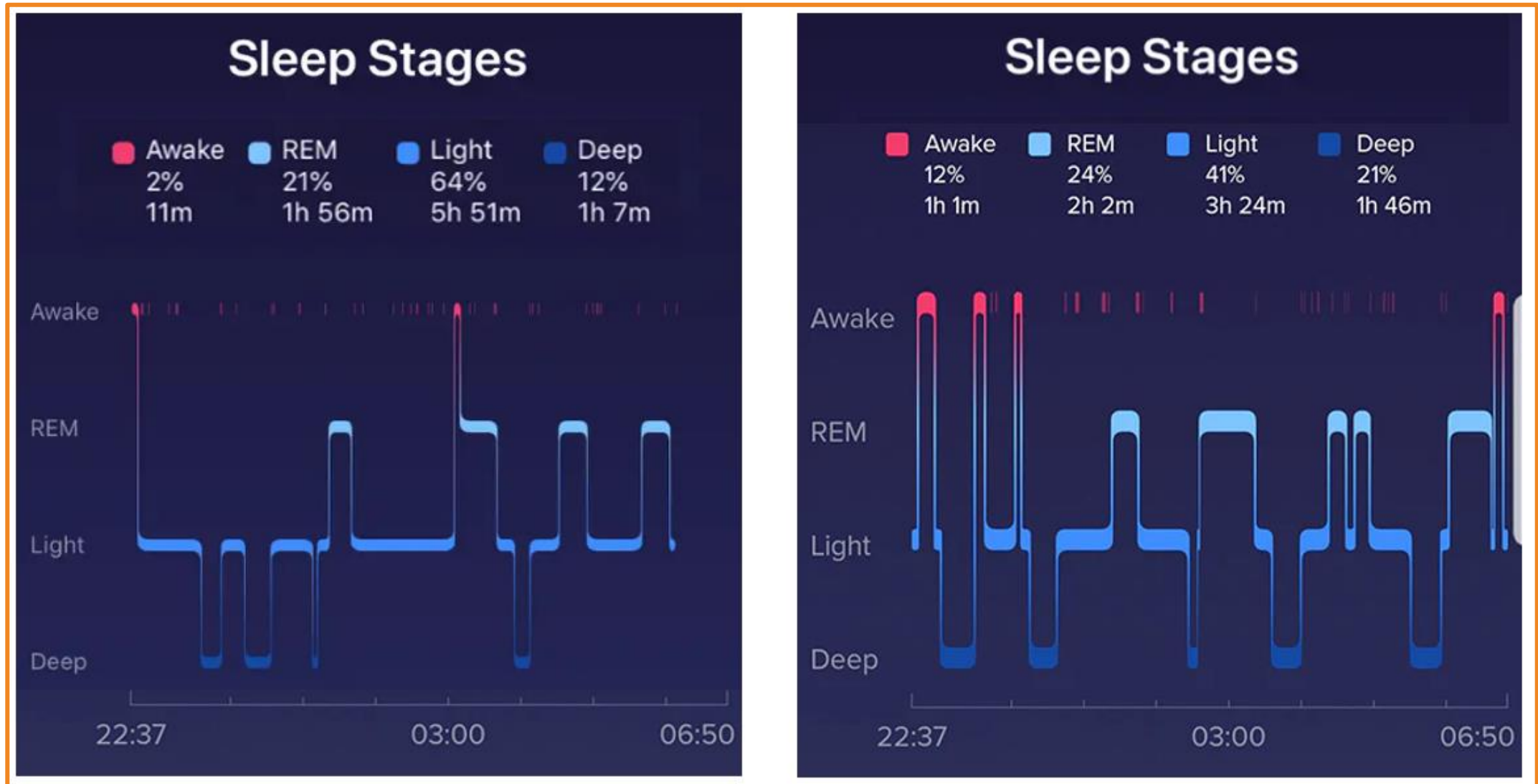
Do teens have more trouble sleeping?

Biological factors and psychosocial factors

Biological factors

Most teens should get 8 to 10 hours of sleep a night, but teens naturally have a harder time falling asleep. During the teen years the body's internal sleep clock is reset to fall asleep later at night and wake up later in the morning. This change happens because teen brains make the sleep hormone melatonin later at night than child and adult brains do.

Psychosocial factors

Another change is bedtime getting later - parent-set bedtimes become less common and staying up later to study, to train, to spend time on devices etc. all contribute to later bedtimes and less sleep.

My relationship with sleep

Other factors that can affect your quality of sleep

Have a think about some of these and if they could apply to you

- **Do you prioritise your sleep and have a good routine at night?**
- **Your sleep environment; your bed and bedroom.**
- **Your food and drink choices.**
- **Your physical activity and exposure to daylight.**
- **Screen use and light or blue light exposure late in the evening.**
- **Having devices in your bedroom after lights-out.**
- **How late your friends stay up. Fear of missing out is important.**
- **Stress, anxiety, and worry are also common reasons for sleep problems.**

Homework – Sleep diary

Sleep diary – Keep track of your sleep for a week

Fill in the sheet every morning

Record the day of the week below:	Last night I went to bed at:: (Record the time below)	Last night, I fell asleep at:: (Record the time below)	This morning I got out of bed at: (Record the time below)	Last night I slept a total of: (Record the number of hours)	I woke up during the night: (Record number of times)	When I woke up for the day, I felt: (Tick one)	My sleep was disturbed by: (List any mental, emotional, physical or environmental factors that affected your sleep, e.g. stress, snoring, physical discomfort, temperature, phone beeping)	About 1 hour before going to sleep, I did the following activity: (List activity; e.g. watched TV, did schoolwork, read a book, ate some food, drank something, used a phone or screen.)
Day 1 Day _____				_____ Hours	_____ Times	☐ Refreshed ☐ A bit refreshed ☐ A bit tired ☐ Very tired		
Day 2 Day _____				_____ Hours	_____ Times	☐ Refreshed ☐ A bit refreshed ☐ A bit tired ☐ Very tired		
Day 3 Day _____				_____ Hours	_____ Times	☐ Refreshed ☐ A bit refreshed ☐ A bit tired ☐ Very tired		
Day 4 Day _____				_____ Hours	_____ Times	☐ Refreshed ☐ A bit refreshed ☐ A bit tired ☐ Very tired		
Day 5 Day _____				_____ Hours	_____ Times	☐ Refreshed ☐ A bit refreshed ☐ A bit tired ☐ Very tired		
Day 6 Day _____				_____ Hours	_____ Times	☐ Refreshed ☐ A bit refreshed ☐ A bit tired ☐ Very tired		
Day 7 Day _____				_____ Hours	_____ Times	☐ Refreshed ☐ A bit refreshed ☐ A bit tired ☐ Very tired		

Lesson review and 3-2-1 exercise

Learning Goals

At the end of the lesson, I now:

- Better **understand** the science of sleep
- Am able to **identify** some common sleep problems
- Better **understand** my own relationship with sleep.
- Am ready to **practice** personal sleep analysis

3-2-1

- **Three** things I learned today.

- **Two** Things I found interesting?

- **One** question I still have?