



**Black Dog**  
Institute

Sleep Ninja®

# Sleep Ninja® for the Classroom

An educational program about sleep health  
for Years 7–10.



**Lesson 1: Sleep and the Body**



Scan the code to visit  
the Sleep Ninja® website



# Lesson 1: Sleep and the Body

## Introduction

On one hand, it seems so simple – sleep refreshes the body. But the more scientists learn about sleep, the more its complex role in all of the body systems becomes apparent. Not to mention the benefits sufficient sleep offers to an individual's mental and emotional wellbeing (important topics covered in Lessons 2 and 3).

Lesson 1: Sleep and the Body introduces students to concepts and practical advice about sleep and the body clock. Lessons 2 and 3 round out this understanding by covering sleep and the mind, and how sleep affects social and emotional health.

If your school timetables long periods, you can cover more than one lesson in a period because you will not need to repeat concepts on the Student Sleep Factsheet. Check the Variations on page 13 for suggestions.

## Overview



### Part 1 – Tune In

A light-hearted game helps students to envisage the benefits of sleep in a way that may help make these benefits personally attractive (the team analogy).



### Part 2 – Find Out

Explicit teaching about sleep covers two key areas: 1. An understanding of the circadian rhythm or body clock, and 2. What happens when you sleep. The Student Sleep Factsheet is introduced as a handout or on slides.



### Part 3 – Take Action

Students take action towards positive management of their own sleep health.

## Learning intentions

Students will learn about some of the benefits of sufficient regular sleep and strategies for improving their sleep.

## Success criteria

Students can:

- > name some of the benefits of sufficient sleep,
- > identify how much sleep is enough sleep for an adolescent (8–10 hours every night or most nights),
- > articulate strategies for getting better sleep.



## Curriculum links

### Australian Curriculum, version 9.0

#### Health and Physical Education – Years 7 & 8

- Analyse the impact of changes and transitions, and devise strategies to support themselves and others through these changes. AC9HP8P02
- Plan and implement strategies, using health resources, to enhance their own and others' health, safety, relationships and wellbeing. AC9HP8P10

#### Health and Physical Education – Years 9 & 10

- Refine, evaluate and adapt strategies for managing changes and transitions. AC9HP10P02
- Plan, justify and critique strategies to enhance their own and others' health, safety, relationships and wellbeing. AC9HP10P10

## Resources and optional further reading

### Sleep in the teenage years

- [Why is sleep so important?](#)
- [Teenage sleep – info from the Sleep Health Foundation](#)
- [How much sleep do I need?](#)

### How sleep works

- [Sleep Health Foundation – The body clock](#)
- [Sleep Health Foundation – Dreaming](#)
- [How does sleep work? \(2:35 min YouTube video explaining the phases of sleep\)](#)



#### Location

The classroom



#### Duration

45 min – plus optional extensions

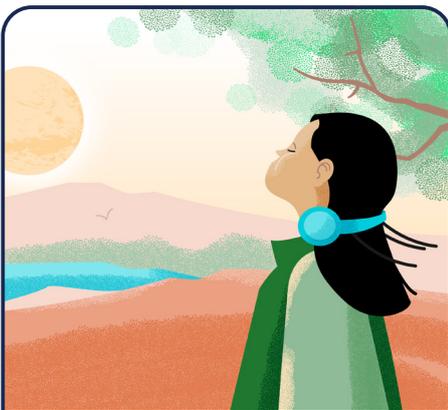
### Extensions and variations

Student projects and the Sleep Ninja® app from Black Dog Institute. See page 13.



## Notes and what you need

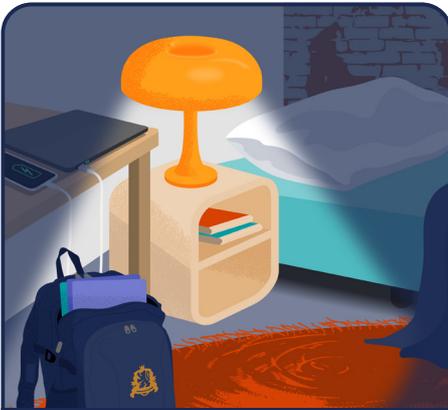
- For Part 2, copies of the Student Sleep Factsheet (in print or digital form). This can be found in the Teacher Guide and on the [Sleep Ninja for the Classroom website](#).
- Slides are provided if you would like to use or adapt them – these slides can be found on the [Sleep Ninja for the Classroom website](#).
- For Part 3, you will want the slide deck for the ‘Spot the problem’ activity.
- For Part 3, a few sticky dots or marker pens.
- For Part 3, seven pieces of paper (A3 or A4) with one of these sleep strategies on each piece:



**1** Get daylight in the morning.



**2** Have a regular bed time and morning wake up time.



**3** Follow a bedtime routine.



**4** Limit your sleep-in time to 2 hours.



**5** Avoid naps.



**6** Limit your intake of caffeine.



**7** Exercise.



## Part 1 – Tune In (4 min)

# Why sleep health matters to me

## Fast focus game

- Put students in pairs. Tell them we're going to play a very short thinking game.
- Ask partner 1 to spell out their full name, letter by letter but BACKWARDS. This includes their last name, any middle names, and first name/s – starting from the last letter of their last name. (Don't set a timer because people's names are different lengths.)
- Partner 2 writes down how many times they have to stop, think, or restart.
- Swap roles. Partner 2 recites their full name from last letter to first and Partner 1 makes notes.
- Draw a line on the board. Write 'VERY HARD' at one end and 'VERY EASY' at the other end.



- Ask the class to rate: How hard was it to do this task? Why did you give it this rating?
- Put a dot on the line wherever the class decides this task should sit between hard and easy.

## Sleep and mental focus

- Ask: If you were doing this activity on a day when you had had barely any sleep, would it be harder or easier?
- Let's say you stayed up too late the night before, or a really annoying loud marching band practised right outside your window all night!
- How hard do you think it would be to do the task when you're really short on sleep?
- Ask the class to tell you where to put a second dot on the line indicating how hard the task would be after very little sleep. Write 'short sleep' next to the second dot.
- Why did you give it this rating?
- Discuss experience of how it's often harder to do complex tasks when you haven't had enough sleep.





## Part 2 – Find Out (25 min)

# Why my body needs enough sleep

## Superselectors (5 min)

- Divide the class into 6 groups. Get them to move to corners of the room if you like.
- Name them Team A – B – C and so on, and make sure the 6th group comes to the front of the room, regardless of whether the rest of them moved. The last group is The Selectors (drumroll).
- Tell the class the scenario: everyone here are candidates for a competition. They are grouped by their 'super strength'.
- Read them out:

Group	Super strength
1 Candidate group A	<b>You all have excellent hand-eye coordination</b> for amazingly quick and accurate reactions.
2 Candidate group B	<b>You are super-quick at mental calculations</b> and clear thinking.
3 Candidate group C	<b>You can solve a problem with creative, clever solutions</b> that are a cut above.
4 Candidate group D	<b>Your stamina and energy are phenomenal.</b> You're all speedy and just don't tire out.
5 Candidate group E	<b>You are in great health!</b> All systems working optimally, no sick days here.
6 Selectors (front of the class)	You are the head coaches, selecting your best team ...

- Explain that the **Selectors** are putting together a top team for a serious competition. (Make it a kind of challenge your class might be interested in – a sport tournament, MasterChef or Gladiator show team challenge, even a Robot Wars challenge.) The Selectors have the tough job of putting together a team of five fabulous candidates.
- Read all five candidate groups' super strengths again.
- Selectors will choose 5 candidates for their team.
- They can choose from any of the candidate groups in the room. 5 players only.
- Ask **Selectors** to think **silently** for a few seconds: Which candidate groups will you select from, for your team?
- Each Selector points out which groups they will have players from (e.g. '2 of those, and 1 of those and 2 of those makes 5').
- Invite Selectors to take turns nominating a combination of strengths they want to select.
- If they say they'll take all the very speedy players, ask what if their hand-eye coordination is abysmal, etc.
- Keep going until someone says they want ALL the strengths, then wrap up the game there. It could be quite quick.



## Why your body needs sleep in adolescence (5 min)

- Send students back to their seats as needed.
- Explain: Pretty much everyone in their adolescent years needs 8–10 hours of sleep every night to be on top of their game. There are a very few people who naturally need less sleep, but that is unusual – 8–10 hours is what teenagers need.
- Having regular and sufficient levels of sleep is exactly like getting all the best strengths on your team! (Sleep is the best selector ever.) All your skills and capabilities are present and in play: you are quicker, more coordinated, better at problem-solving, calculations and creative thinking, you have more stamina and energy, you look great. And you are generally in better health and less likely to get sick when you regularly get your 8–10 hours of sleep.
- Emphasise that having ALL of these benefits is best and that you can't choose to have some and not others – either you get sufficient sleep on a regular basis to gain these benefits, or you don't. Trying to skimp on sleep over the long term loses out.
- An occasional night of broken sleep isn't a big drama. But over the long term, if you consistently get 8–10 hours of sleep every night there are three personal areas where you noticeably benefit:

### The benefits of sufficient sleep

1



#### Your body works and grows well

Your body works at its best.

You have your best **energy**, stamina, strength, motor skills and hand-eye coordination. You are quick, capable and nimble. You can learn new hand-eye coordination skills and sporting skills more easily. Your **performance** is better at gaming, sport, dance, music and drama, and at any task that uses **physical dexterity**.

Your **body systems** are all in tune, and it's easier to maintain cardiovascular and metabolic health. Injuries and infections heal better. Your body has the best chance of **growing** and **developing** well.

Your hair, skin, eyes all reflect the fact that you are refreshed. You have fewer blemishes, your eyes are sparkling and clear, your hair is shinier. You look in better health because you are.

2



#### Your mind is quick and switched on

Your brain is working optimally and is ready and able to learn. This means you perform better at your school work across all kinds of mental tasks that require **focus** and **concentration**. Your critical thinking capabilities are better when you have regular, sufficient sleep.

This means it's easier to achieve in **academic studies**, in situations that require you to **think creatively** and critically to **solve problems** or come up with new ideas.

Your brain is fast, switched on and ready to engage!

3



#### Your emotions and mood are better

You are **calmer** and more relaxed. Sleep gives your mind time to put away and process emotions (amongst other things), so you are **less stressed**, more able to see things in perspective and more aware of your own and other people's feelings.

This means you are calmer and a **better friend**. You are more **patient** and a better listener. Your capacity to engage with stories, jokes and fun banter is higher.

You are more likely to be **fun** to be around!



## The science of sleep (15 min)

- Explain the key concepts about sleep which can be found in the two boxes below:
  1. The circadian rhythm or body clock – what is it and how does it work?
  2. What happens when you sleep – and why this matters.
- The key concepts are at the top of each box. Further science content is below.
- Adjust how much you cover as needed for your cohort.
- Additional information is on the Student Sleep Factsheet for deeper investigation, perhaps as a group, or student projects during or after the lesson.
- Discuss any ideas that students are not clear about.
- Resources and further reading at the end of the lesson can be used if students need help or are digging further for a project.

### The science of sleep

## 1 The circadian rhythm or body clock

### Key concepts:

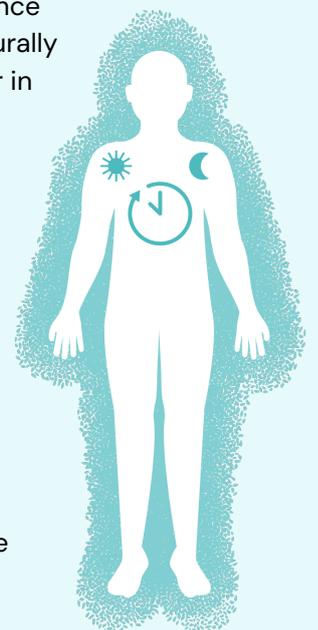
**What is it?** It is your body clock which runs on about a 24-hour cycle.

**What drives it?** The amount of light and dark your body senses is one of the major drivers.

**How does this relate to me?** Your circadian rhythm tells your body when to be alert and when to be sleepy. Keeping your body clock running smoothly helps you get better sleep.

More info:

- Every human being runs on a 24-hour cycle of physical, mental and behavioural changes. This cycle is called the **circadian rhythm** or **body clock**.
- The circadian rhythm regulates when you feel sleepy and when you feel alert.
- The circadian rhythm is regulated by light and darkness, body temperature, how much exercise you've had, what you've been eating and what activities you are doing.
- It can be affected by stress and social factors, or by disruptions like jetlag and shift work.
- Light prevents you from being sleepy, which is why it's good to turn off all bright lights when you want to go to sleep and not look at bright screens before bed.
- A group of nerve cells in the human brain controls the body clock. (The suprachiasmatic nucleus or SCN.) It performs several functions. One of them is to regulate the production of a hormone called melatonin in response to the amount of light you perceive.
- Darkness stimulates the production of melatonin. When your body produces **melatonin** or you take synthetic melatonin (e.g. as a tablet or gummy), it makes you feel sleepy and can help you go to sleep at night.
- When you get to adolescence your circadian rhythm naturally changes, shifting a bit later in the evening. This is called delayed sleep phase and it means you naturally get sleepy later and want to sleep longer in the morning to get enough sleep.
- So it's normal for adolescents to feel sleepy in the morning, because your body clock is out of sync with the time you need to get up and get ready for school.





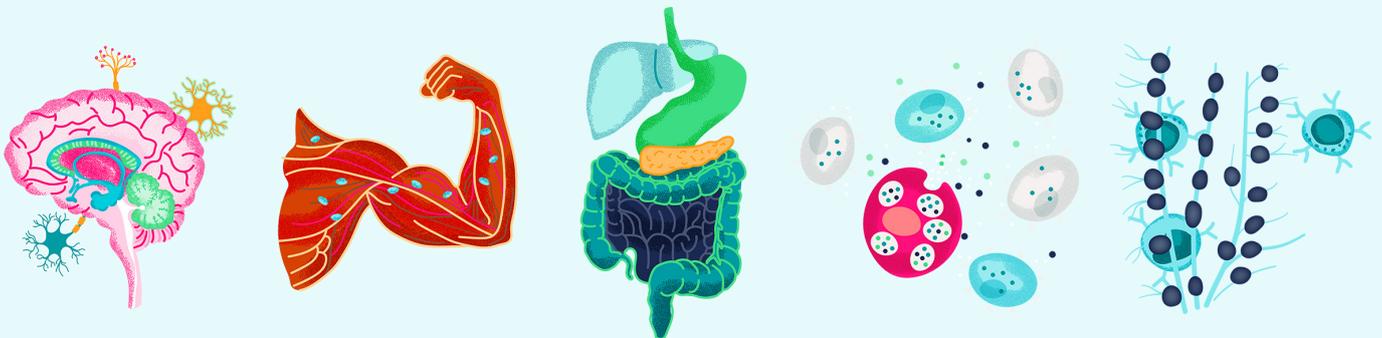
## 2 What happens when you sleep

### Key concepts:

**What is it?** Humans are not machines. We don't just close our eyes and switch 'off'. Lots of things are happening in your body and brain while you sleep. That's WHY you sleep.

**What's happening?** Your body goes through certain stages which allow the body to repair itself, rest, get rid of wastes, make memories and grow new cells.

**How does this relate to me?** Sleeping for long enough allows your body to get into the deeper sleep stages which is when most of the action happens – and it is also when you dream!



### More info:

- Has anyone ever been falling asleep, and suddenly jumped like you think you're falling over? It's called a hypnogogic jerk or a sleep startle, and most people experience it now and then. It happens when you are transitioning from being awake to being asleep and your muscles contract involuntarily.
- When you first fall asleep, you go into a light sleep. There are two stages of this light sleep, and when you are sleeping lightly like this it's easy to wake you up. You might not even think you have been asleep!
- After this you go into the stages of deep sleep. It's hard to wake you up in these stages and you might not remember waking up. If someone tried to wake you, you would probably just fall straight back to sleep.
- Deep sleep is followed by a REM sleep stage (REM stands for Rapid Eye Movement) – this is when dreams happen. Most of your REM sleep happens in the second half of the night.
- Waking up 3–4 times per night is perfectly normal because your body cycles through the five stages of sleep every 90–120 minutes or so, from light to deep, to REM and a quick wake and then back to light sleep. Everyone does this but most people don't notice or remember it happening.
- If you do wake up in the morning and you remember your dreams for a little while, it's because you have woken up right out of REM sleep.
- Did you know that sleep scientists really aren't sure why we dream?

### Teacher note:

- These key concepts and additional information are on the slides and in the Student Sleep Factsheet for you to use now or in student projects.



## Part 3 – Take Action (15 min)

### Sleep strategies

#### Sleep count (1-2 min)

- Ask students to think silently about last night. Ask these questions and they can make notes privately:
  - What time did you get into bed?
  - What time did you fall asleep?
  - What time did you wake up?
  - What time did you get up?
  - Did you get 8 or more hours of sleep?
  - Was this a typical night or not?
- Are you getting 8–10 hours most nights or is it usually (i.e. most days, most weeks) less than 8 hours?
- (Don't stress too much about the occasional night of broken sleep which happens to all of us.)
- If it is consistently less than 8 hours, you're not giving all of your capacity a chance to turn up. Some of your skills and talents – like the candidates in the team selection game in Part 1 – are prevented from coming fully into play. Your body, mind and emotions are not at their best.

#### Spot the problem (2-5 min)

- If you did have trouble getting to sleep last night, discuss some of the barriers getting in the way of getting to sleep (e.g. loud music, bright lights, binge watching a TV show, late study, late exercise, caffeine).
- Show the class this illustration on the slide deck and ask them to identify what things might get in the way of falling asleep.





# The Seven Sleep Strategies

- For this section you will need the small slips of paper with the seven sleep strategies on them (as listed in Resources).
- Tell the class: there are many ways to establish a better relationship with sleep.
- Walk around the room, placing the seven pieces of paper with the sleep strategies on them on different tables or walls. As you place each one, give further details as below:



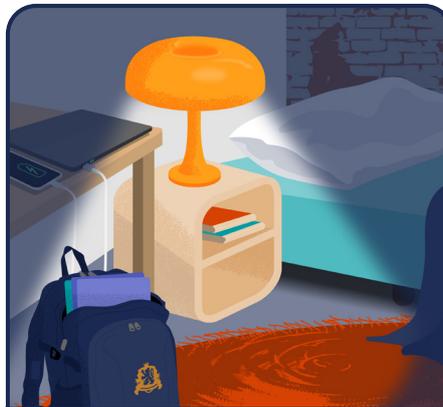
## 1 Get daylight in the morning.

One of the best things you can do to improve your sleep is to get outside and get exposure to natural light, especially in the morning. This helps set your body clock.



## 2 Have a regular bed time and morning wake up time.

Try to be consistent every day, even on weekends. This keeps your body clock in sync so you'll feel sleepy and awake at the right times.



## 3 Follow a bedtime routine.

Before bed, set a routine with regular actions at regular times (e.g. have a shower, brush teeth, dim the lights). In time, these activities will signal to your body that it's time for sleep.



## 4 Limit your sleep-in time to 2 hours.

When you do have a sleep in, try not to sleep in more than 2 hours past your usual wake up time as this can mess with your body clock.



## 5 Avoid naps.

Try not to take naps in the day, or if you must, limit naps to a maximum of 20 minutes before 3pm. Napping in the day can mean you'll feel less sleepy at bedtime.



## 6 Limit your intake of caffeine.

For example, in tea, coffee, energy drinks, Coke, and even chocolate. Having any of these in the afternoon can make it harder to fall asleep at night, so it's best to avoid caffeine in the 4-6 hours before bed.



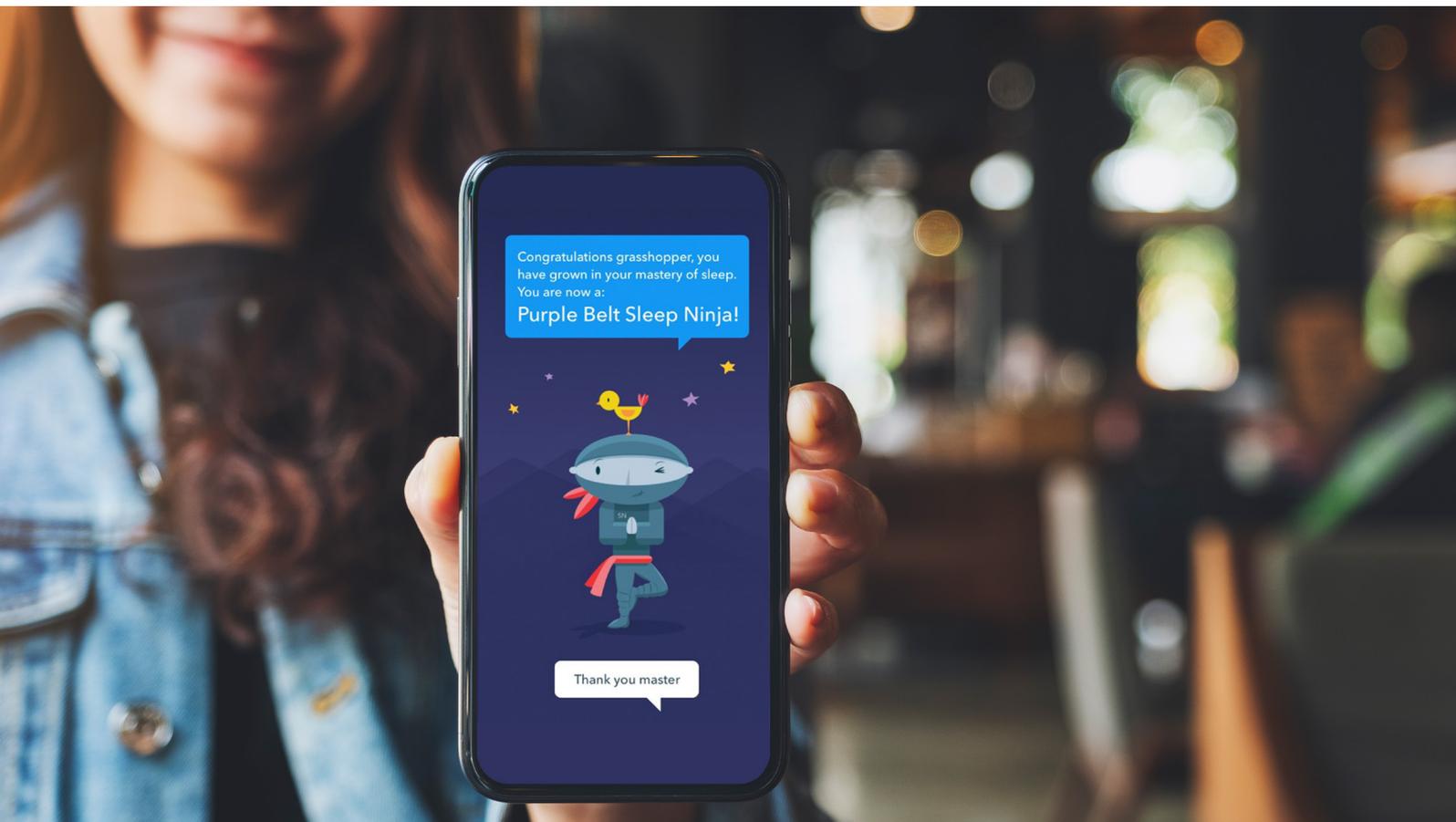
## 7 Exercise.

Getting some exercise during the day can help to create the 'good' kind of tiredness at night time and will help you to fall asleep.



## One thing I can do to get better sleep

- Provide coloured markers and give students 2–3 minutes to move around the room and put a marker on the one sleep strategy that they think they can do consistently.
  - Discuss and review any reflections or observations students may have.
  - Have you ever dreamed that your teacher would tell you your homework was to sleep?
  - Your homework / challenge task is to implement one or more of these strategies for a week at first. Then try two more weeks if it is having a beneficial effect.
  - Keep a record of the strategy or strategies you have put into place. Like we did in the exercise above, write down each day what time you went to bed, the time you fell asleep, when you woke up and when you got up.
- We have created a sleep diary template in editable PDF for students to use, you can find it on the [Sleep Ninja for the Classroom website](#).
  - Or share the Black Dog institute's **Sleep Ninja®** app with students. In the free app, they can learn more about sleep health and record a short sleep diary to learn more about their own personal patterns and relationships with sleep.
    - [The Sleep Ninja app](#)





## Extensions

### Sleep projects

- If you would like students to dive deeper into sleep health, at the end of this lesson you could ask them to undertake a project for assessment. Resources for further reading at the top of the lesson may be useful.
- Here are some suggestions for projects, or you may include these ideas in an assignment or project on healthy behaviours, changes relating to adolescence or establishing good routines for the transition to high school:
  - Brainstorm 10 questions about sleep, research the answers to those questions and present their findings in a poster, short report or podcast.
  - Create a video or podcast about the benefits of sleep from Part 2. This can be persuasive, informative or creative using drama and dialogue.
  - Research one of the sleep strategies in Part 3 and write a short, detailed explanation of why this strategy works.
- You could also have students explore the Sleep Ninja® app to find out more about sleep strategies and see if they want to use it themselves. It includes a sleep diary function and reminders of when to start wind-down routines. It also helps students track the correlation between their mood and their sleep.

## Variations

<b>Part 1</b>	Swap the concentration game for a game of hand-eye coordination that tests concentration (rather than prior learned skill).
<b>Part 2</b>	<p>Modify the selector game by reading out and displaying all five strengths. Each student writes down their selection for their perfect team (e.g. 2 As &amp; 3 Ds). Ask if anyone selected one of all 5 groups.</p> <p>Use the slides to cover the Benefits of Sleep table (benefits to Body – Mind – Emotions).</p> <p>Review the Benefits of Sleep, then play a game of charades in which students mime the effect of insufficient sleep on ONE of the three categories (Body – Mind – Emotions). A partner or group have to guess which one they are miming.</p> <p>Review the Benefits of Sleep, then students choose one and draw how this aspect of their life would be like with sufficient sleep and without it.</p>
<b>Part 3</b>	<p>Provide a visual of an analogue clock to help students calculate the hours of sleep. You can download a clock template on the <a href="#">Sleep Ninja for the Classroom website</a>.</p> <p>Chant or count the hours on fingers to count from bed time to wake time so that each student can calculate how much sleep they had last night.</p> <p>Instead of counting the hours of sleep last night, have students place a marker indicating their perception of how good or poor last night's sleep was on a 3-ring target graph where the centre is great and the outer rings are not so great.</p>