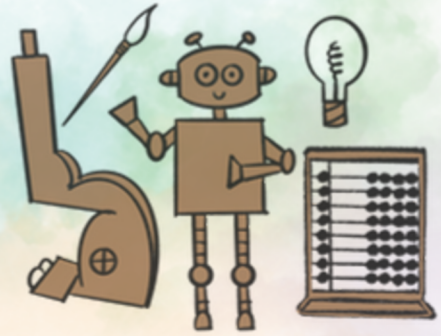




BONUS UNIT

WORKBOOK

Linking circadian rhythms to mindfulness



LCB
EDUCATION

Crafters
Entry Level

Summary Sheet

Linking circadian rhythms to mindfulness

Outcomes

Please tick if your learner has achieved the following outcomes:

- ☐ Describe how the change from autumn to winter causes animals and plants to slow down and conserve energy (e.g., hibernation, losing leaves) (summary sheet)
- ☐ Identify the daily patterns their body follows, like a natural clock (our circadian rhythm), and explain why rest is important (summary sheet)
- ☐ Practise mindful listening to their body's signals (e.g., heavy eyelids, tummy rumbling, feeling irritable) and recognise when they need to take a break or rest over the course of a day (summary sheet)
- ☐ Create an artwork or craft to help their mind feel focused and calm when they feel overwhelmed or restless (student completed work or photographs)
- ☐ Create a simple "Slow-Down Checklist" for home, listing activities they can do when it gets darker earlier to help themselves feel calm and cosy, inspired by nature's need for rest (summary sheet and/or student completed work)

Candidate's name

Candidate number

Witness signature

Date

Witness name

Notes:

Circadian Rhythms and Mindfulness

Circadian rhythms are like a natural clock inside our bodies that tells us when to be awake and when to sleep. Just like this clock helps us know it's bedtime, all living things have ways of noticing the shorter, darker days of autumn and winter.



When autumn turns into winter, the days get shorter and colder, causing nature to slow down to save energy.

- Some animals, like bears and hedgehogs, go into hibernation, which is like a very deep, long sleep where their body temperature and breathing drop right down. This helps them survive when food is scarce.
- Most trees lose their leaves in autumn. Deciduous trees do this to stop losing too much water and to use less energy when there isn't as much sunshine to make food. The tree basically rests until spring.

Your body also has a clever daily pattern called the **circadian rhythm** - your natural, 24-hour clock. This clock is mostly controlled by light and darkness.

- When it's bright in the morning, your body knows it's time to wake up and be active.
- As it gets dark in the evening, your body starts making a special hormone called melatonin, which makes you feel sleepy and tells your body to slow down for rest.

Just like plants and hibernating animals need to conserve energy, you need rest, especially when it's dark and cold outside!

- When you sleep, your body gets a chance to repair and grow. It's like charging a battery so you have lots of energy for playing and learning the next day.
- Rest also helps your brain organise all the amazing things you've learned during the day.

Linking circadian rhythms to mindfulness

Research. Answer the following multiple choice questions by circling or highlighting the correct answer.

1.

What is your circadian rhythm most like?

- A) A calendar that tells you the date.
- B) An alarm clock inside your body that tells you when to sleep and wake up.
- C) A ruler for measuring height.
- D) A musical beat to your favourite song.

2.

Why do deciduous trees drop their leaves in the autumn?

- A) To make colourful messes on the ground.
- B) To save water and energy during the cold winter months.
- C) To make room for new buds/flowers to grow right away.
- D) To give birds nesting material.

3.

When animals like bears and hedgehogs go into hibernation in the winter, what happens to their bodies?

- A) They get very noisy and play games all the time.
- B) They start to change colour to camouflage into their environments better over winter.
- C) Their body temperature and heart rate slow down a lot to use less energy.
- D) They go to bed, bump their head and don't wake up again until morning.

Linking circadian rhythms to mindfulness

Research. Answer the following multiple choice questions by circling or highlighting the correct answer.

- 4.** What is the main reason plants and animals need to slow down and conserve energy when the season changes from autumn to winter?
- A) They get bored because there are fewer fun things to do outside.
 - B) There is less sunlight and it is harder to find food.
 - C) Their legs and branches get too tired from the summer fun.
 - D) They are waiting for a holiday.
- 5.** What do we call the type of trees that lose all their broad, flat leaves every year in the autumn?
- A) Evergreen trees.
 - B) Sleeping trees.
 - C) Cactus trees.
 - D) Deciduous trees.
- 6.** When the days get shorter in the autumn, what special coloured substance do trees stop making, which allows us to see their beautiful yellow and orange colours?
- A) Carbon Dioxide
 - B) Chlorophyll
 - C) Water
 - D) Sunlight

Candidate's Name: _____ Candidate Number: _____

Linking circadian rhythms to mindfulness

Critical thinking. Identify the daily patterns your body follows by filling in the table below. Put one star for low energy, two stars for normal energy and three stars when you feel the most energetic.

My Body's Activity	My Energy Level (Draw 1, 2 or 3 stars ★)
Waking up, eating breakfast.	
Playing, learning.	
Eating lunch, perhaps a small rest.	
Playing outside, doing an activity.	
Getting ready for bed, winding down.	
Sleeping deeply and dreaming.	

Candidate's Name: _____ Candidate Number: _____

Linking circadian rhythms to mindfulness

Critical thinking. Draw a line to match what your body does during the day to how it "recharges" and recovers from that activity at night.

Your body uses energy during the day for learning and playing.

Your brain sorts and stores memories and new information.

Your muscles get tired from running.

Your body fixes and builds muscle fibres.

Your brain learns new things in a lesson.

Your body builds up more energy stores for tomorrow.

Critical thinking. Fill in the blanks using the following words:

rest, learn, play, recharge.

Sleep is like giving your body and brain a long _____

so you can _____ your energy, and then be able to

_____ and _____ better

tomorrow!

Candidate's Name: _____ Candidate Number: _____

Linking circadian rhythms to mindfulness

Get practical. Over the course of a day, practise mindful listening to your body's signals (e.g., heavy eyelids, tummy rumbling, feeling irritable) and recognise what your body needs by filling in the table below.

Time	Signal from my body that I noticed	What my body needed at that time

Candidate's Name: _____ Candidate Number: _____

Linking circadian rhythms to mindfulness

Get practical. At a time where you are feeling overwhelmed or restless, create a mindful artwork or craft to help you feel more focused and calm. Put a photograph of your work below.

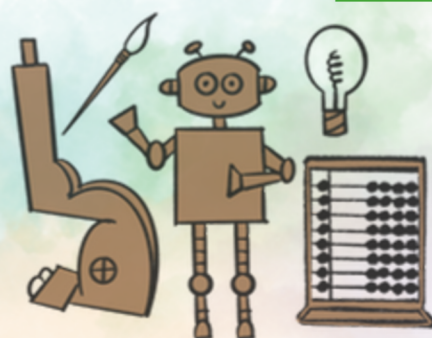


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Linking circadian rhythms to mindfulness

Critical thinking. Create a simple "Slow-Down Checklist" for home, listing activities you can do when it gets darker earlier to help you feel calm and cosy, inspired by nature's need for rest during this season.





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