

## APPLICATIONS of RESEARCH into SLEEP & DREAMING: the neuropsychology of sleep & treatment of insomnia



### PART A: the neuropsychology of sleep & sleep disorders

*Read pages 150-151 & answer the following:*

1. Explain what endogenous pacemakers & exogenous zeitgebers are.
2. Give an example of an exogenous zeitgeber
1. Explain what role the hypothalamus plays in sleep.
2. Give an example of an endogenous pacemaker.

### PART B: Development of treatments of insomnia

*Read page 151 & 163-164 & answer the following:*

1. Explain the difference between sleep onset insomnia and sleep maintenance insomnia.
2. Describe what could happen to someone if the hypothalamus is damaged.

**TASK:** Create a leaflet for someone suffering from insomnia that outlines relaxation techniques, sleep hygiene education and sleep hygiene in the physical environment.



### PART A: the neuropsychology of sleep & sleep disorders

*Read pages 150-151 & answer the following:*

1. Explain what endogenous pacemakers & exogenous zeitgebers are.
2. Explain what role the hypothalamus plays in sleep.
3. Give an example of an endogenous pacemaker and exogenous zeitgebers.
4. Explain the role of the pineal gland in sleep.

### PART B: Development of treatments of insomnia

*Read page 151 & 163-164 & answer the following:*

1. Explain the difference between sleep onset insomnia and sleep maintenance insomnia.
2. Describe what could happen to someone if the hypothalamus is damaged.
3. Outline relaxation techniques (how & why).

**TASK:** Draw a picture of your bedroom. Annotate this picture explaining the different ways that you can improve the sleep hygiene in your environment. Underneath, describe how sleep hygiene education could also improve your sleep.



### PART A: the neuropsychology of sleep & sleep disorders

*Read pages 150-151 & answer the following:*

1. Explain what endogenous pacemakers & exogenous zeitgebers are, giving examples of each.
2. Explain the role of the hypothalamus in sleep including the effects of hormones (especially melatonin).

### PART B: Development of treatments of insomnia

*Read page 151 & 163-164 & answer the following:*

1. Explain the features and causes of the sleep disorders, sleep onset insomnia and sleep maintenance insomnia.
2. Explain the link between damage to the hypothalamus and insomnia.
3. Describe what relaxation techniques are & explain how they affect the nervous system.

**TASK:** You are a sleep therapist. Write a script for a session with someone suffering from insomnia, outlining the three ways they can improve their sleep (relaxation, sleep hygiene education & hygiene in their environment).

**CHECKING YOUR LEARNING:** when you have finished your pathway, complete the two practice questions on the website.