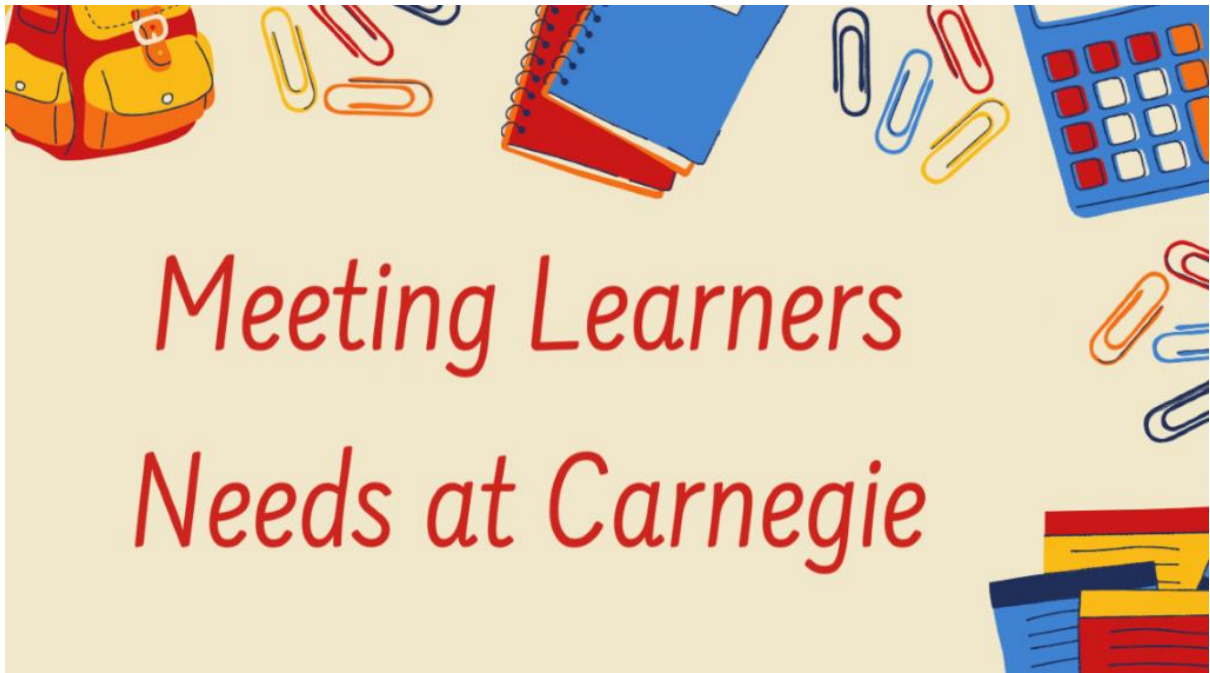


# Carnegie Primary School



## Sleep Toolkit

## What is in this toolkit?

This toolkit provides information on how to help support and promote sleep and sleep routines. The material included has been used with kind permission from Sleep Scotland. See <https://www.sleepscotland.org/> for further advice, resources and support.



If you have any further questions, please get in touch with the Carnegie Support for Learning Team.

## Why do we sleep?

We still don't really know, but we do know that we need it. Sleep allows our bodies to carry out functions that are vital for our physical and mental wellbeing, leading to a whole range of benefits...

- **Cell growth and repair** - during sleep, new cells grow and existing cells are repaired, keeping us healthy, and our immune system strong
- **Memory** - while we sleep our brains move short-term memories into long-term storage, especially important for young minds learning about the world or studying for exams
- **Relaxation** - sleep gives us respite from the information overload of the day
- **Healthy eating** - good sleep balances production of the hormones leptin and ghrelin, which help us to follow a healthy diet rather than craving more carbs
- **Concentration** - healthy sleep helps us to function better during the day, driving more safely, working and studying more effectively, getting more out of the activities we enjoy

- **Good mood** - after a good night's sleep we usually feel happier, and more able to deal with the issues life throws at us
- **Social interaction** - feeling rested helps us to keep an eye on our actions, taking fewer risks, reacting appropriately to other people, enjoying others' company
- **Energy** - a good sleep pattern means we have the energy to get the most out of the time when we're awake

#### For children and young people, this means:

- Healthy growth
- Positive mood and sociability
- Better mental health
- Doing better at school
- Enjoying life
- Improved immunity and better recovery from illness
- Healthy weight

For parents and carers, it's also important to be aware of how lack of sleep can affect your own mental and physical wellbeing. Look out for changes in mood and concentration, or for raised levels of anxiety or depression, and remember that driving when sleep deprived can be as dangerous as driving when drunk.

## What makes you sleep?

*'Falling asleep happens as the result of a combination of effects inside our bodies and triggers from outside.'*

**Circadian rhythm** - also known as the body clock, this is the rhythm that helps us to follow a routine of waking and sleeping over 24 hours. External factors in the world around us fix us to this rhythm - these include temperature, mealtimes, social activities and light.

In the mornings, daylight triggers the production of a hormone called cortisol, which wakes us up and makes us feel alert. At the end of the day, when it starts

to get dark, our cortisol levels drop and another hormone, melatonin (sometimes known as the 'sleepy hormone'), increases helping us to feel ready for sleep.

**Sleep pressure** - sleep pressure builds up gradually from the time we wake up, eventually leading to us feeling tired and ready to sleep. In a good sleep routine, this happens at night-time, at the same time as melatonin hits its peak.

## What does a good sleep look like?

We usually go into sleep through NREM (Non-Rapid Eye Movement) sleep, and work through 3 steps or stages

**NREM Stage 1** - light sleep

**NREM Stage 2** - slightly deeper sleep

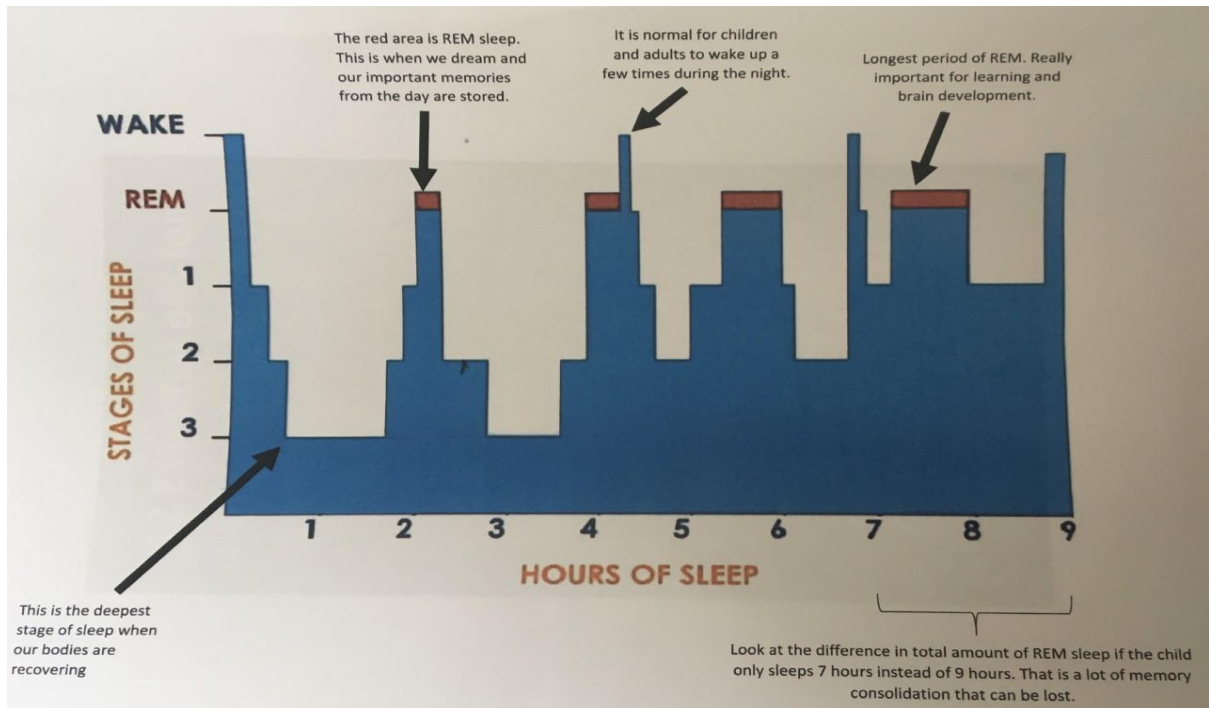
**NREM Stage 3** - the deepest stage of NREM sleep

NREM sleep is shown in blue on the diagram below. Even though it's when we can be in our deepest sleep, our bodies will still be working hard releasing hormones and renewing and repairing tissues.

After NREM sleep, we usually go into a phase of REM (Rapid Eye Movement) sleep, shown in red on the hypnogram. REM sleep is a lighter, drowsy sleep and it's when memory consolidation happens and often when we dream.

In a good night's sleep, we cycle through each of these stages 4 or 5 times, with each cycle lasting around 90 minutes in an adult.

Each stage of sleep provides us with one or more of the benefits described above; if we lose out on sleep at any stage, we miss out on its benefits. As the hypnogram shows, if we sleep for fewer hours, we miss out on the benefits of chunks of REM sleep and NREM Stages 1 and 2 sleep



## Does sleep change over our lives?

- **Babies** in the first three months of life often go straight into REM sleep and have frequent naps. This helps them with memory consolidation.
- **Teenagers** tend to feel sleepy later at night, and want to sleep in later in the mornings, because of hormonal changes.
- **Children** of different ages need different lengths of sleep at night.

## How to get a good night's sleep

### 1. Work out how much sleep your child needs

How long should my child sleep?



**Average Sleep Needs**

<b>Age</b>	<b>Recommended</b>
Newborns <i>0-3 months</i>	14 to 17 hours
Infants <i>4-11 months</i>	12 to 15 hours
Toddlers <i>1-2 years</i>	11 to 14 hours
Preschoolers <i>3-5 years</i>	10 to 13 hours
School-aged children <i>6-13 years</i>	9 to 11 hours
Teenagers <i>14-17 years</i>	8 to 10 hours
Young adults <i>18-25 years</i>	7 to 9 hours

Based on recommendations by the National Sleep Foundation

Starting from the time you want your child to wake up in the morning, count back to the time they need to fall asleep.

For example, 9-year-old children need around 10 hours sleep a night: if your 9-year-old needs to get up at 7am, then they should be falling asleep around 9pm.

## **2. Have a consistent routine**

Get your child up at the same time every morning and have their bedtime at the same time every night, even at weekends and on the holidays.

To make sure their bodies are creating melatonin and reducing cortisol at the right time, children need to have a consistent routine which signals to their body that it's time to sleep. Changes in bedtime routine or exciting activities just before bed can stop children from sleeping.

Even one or two late nights or lie-ins can upset their sleep routine and lead to problems falling asleep the next night.

### **3. Wind down for sleep**

Take an hour before bedtime to relax.

It's important to be as relaxed as possible at the time you want to fall asleep. If we're excited or anxious, then our bodies produce extra cortisol, a hormone which wakes us up and suppresses the production of melatonin, the hormone which encourages us to become sleepy. For children, lots of activities can create cortisol in the body- for example playing with friends, watching TV or exercising. If we have too much cortisol in our bodies before bed, it will stop us falling asleep.

#### **DO-**

Move your child from the daytime part of the house to the night-time part, during the wind-down hour. This means that there's a clear transition between daytime and bedtime for them.

Spend one-to-one quiet time with your child.

Listen to relaxing music or audio books.

Read stories.

Do calming crafts like knitting, puzzles or jigsaws.

Do colouring or drawing.

Have a bath- the rise and drop in temperature will relax your child and prepare them for sleep.

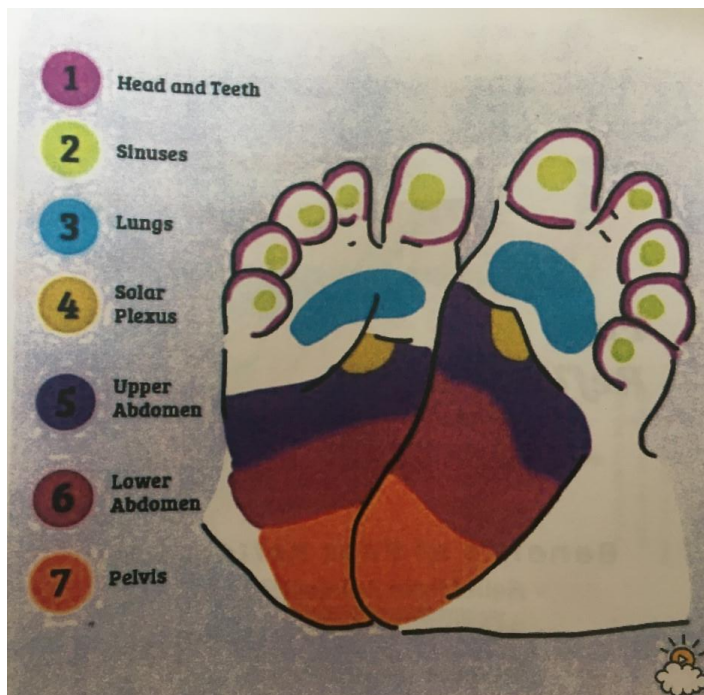
Dim the lights- this encourages your child's brain to get ready for sleep.

Meditate or listen to a guided visualisation.

Do stretching or yoga exercises.

Try a massage or story massage.

Reflexology for foot massage:





Essential oils for relaxation:



#### **DON'T-**

Allow your children to watch TV or anything with a screen.

Start any energetic or exciting play eg. Splashy bath or chasing game.

Begin in-depth chat about anxieties or worries (save this for earlier in the day).

#### **4.Keep the bedroom calm**

Try to ensure your child has a quiet, calm, dark bedroom to sleep in. Even if children play in their bedrooms during the day, it's important that bedrooms become quiet, calm and dark before bedtime. Any stimulation before bed may keep your child awake. For young children, this could include sleeping in the same

room as siblings, or even anxiety about being left alone in their bedroom. For teenagers, it could be watching TV, gaming, or going on social media in their rooms. Tidy away toys at the end of the day, to avoid having too much clutter in the room.

Make sure your child feels safe in their bedroom, and check that it's not too warm or too cold (16-18 degrees is ideal).

## **5. Ditch the tech**

Avoid activities which use screens an hour before bed and keep screens out of the bedroom.

TVs, tablets, phones or anything with a screen gives off blue light. This suppresses the production of melatonin, the hormone which encourages us to sleep. Everyone can be affected by this, but young children absorb more of this light through their eyes, so it's particularly a problem for them.

Add in the fact that information or visuals from TV, phones or tablets can be exciting or cause nightmares in children, and you can see why they're a bad idea in the run-up to bedtime.

## **6. Control light**

Too much light tricks our brain into thinking it's daytime and that we should be awake- this could be daylight sneaking into the bedroom, a bright light in the bedroom or bathroom, or light from a TV or phone screen.

Remove screen and dim lights in the wind-down hour before bed, and if there's daylight getting into the bedroom, consider putting up blackout blinds or curtains.

## **7. Relax**

Keep stress out of bedtime:

Keep any talk about anxieties or worries to earlier in the day, well before the wind-down hour.

Make sure your child has de-stressing activities during the day- exercise, listening to calming music, colouring, or walking the dog.

Try relaxation, guided visualisations, yoga, breathing exercises, or stretching in the run-up to bedtime, to help get rid of stress and tension in the body.

Stay calm yourself at bedtime, to help your child relax.

Practice! It may take time to find the right activity that helps your child relax- what works for one child does not always work for another.

## **8. Exercise in the daytime**

Getting out and exercising during the day will help your child feel tired at night and is a great way of reducing stress. If you can, encourage them to walk, run, play or exercise outside in the sunlight early in the day.

Don't do strenuous exercise in the 2 hours before bedtime. Gentle stretching or yoga are a great alternative for releasing tension in the wind-down hour.

## **9. Eat to encourage sleep**

It's best not to eat too heavily in the run-up to bedtime, so that your body is not digesting overnight. Avoid snacks less than an hour before bedtime, but a light supper before this (milk, toast, a banana, or crackers and cheese) can help your child to sleep through the night.

**Some foods are rich in tryptophan, which helps us to feel sleepy:**

Turkey and chicken

Milk

Beans

Peanuts

Sunflower and pumpkin seeds

Eggs

Spinach

**Some foods make it harder to sleep:**

Chocolate

Sweeties

Other sugary foods

It's important to think about what our child is drinking, too. Water, warm milk, herbal teas and small amounts of diluting juice are fine. Cola, energy drinks, or any drinks containing artificial sugar and/or caffeine can be a real problem- caffeine can stay in some young people's system for up to 10 hours.

During the daytime, try to keep regular mealtimes- this will help your child's body clock to regulate their sleep.

## **10.Napping**

If your child still needs a nap, make sure that they're awake again by 2pm- any later will delay them feeling sleepy at bedtime. Older children and teenagers should try not to nap during the day, but if they need to, keep it to no more than 20 minutes, and be awake again before 2pm.

## 11. Manage life changes

Big changes in life can make it hard for your child to relax before bed or may make their routine inconsistent- which could disrupt their body clock. This could be things like moving schools, the arrival of a new brother or sister, or parents separating.

Do what you can to give your child as much consistency as possible. Make sure they feel comfortable talking about their thoughts and feelings during transitional times.

### Further resources suggested by Sleep Scotland:

#### Useful stories

- Joyce Dunbar (2006) **Tell Me Something Happy Before I Go to Sleep**, WHSmith
- Michael Foreman (2007) **Dad! I Can't Sleep**, Andersen Press Ltd
- Dawn Huebner (2008) **What to Do When You Dread Your Bed: A Kid's Guide to Overcoming Problems with Sleep**, Magination Press
- Capucine Mazille (2007) **How Will I Ever Sleep In This Bed?** Sterling
- Jane Simmons (2000), **Go to Sleep Daisy**, O'Brien Press Ltd

#### Practical Resources

- Dunelm Mill [www.dunelm-mill.com](http://www.dunelm-mill.com) provide **blackout blinds** in various sizes.
- <http://www.magicblackoutblind.co.uk> provide **black out blind sheets** which are easy to tear off and can be cut to fit most standard window sizes with 10 sheets on a roll.
- [www.rompa.com](http://www.rompa.com) and [www.specialdirect.com](http://www.specialdirect.com) provide specialist products for children with additional support needs.
- [www.relaxkids.com](http://www.relaxkids.com) provide a range of relaxation products for sleep specifically for children.
- <http://fledglings.org.uk/> provide a range of equipment for children with additional support needs.
- <http://gro.co.uk/> provide products such as the Gro-clock and the Gro Anywhere Blind

