



How to Reduce Eyestrain Symptoms

We at Gurukul Global School are always striving to improve Online Learning Infrastructure, while ensuring that our students remain mentally and physically healthy. We have prepared this document under expert consultation to help students effectively manage any eyestrain issues.

A. Understanding Eyestrain

A minor percentage of students with photosensitive eyes, when exposed to bright light sources may experience some bothersome **side effects**.

B. Eyestrain Symptoms

Eyestrain Symptoms may include one or more of the following:

- Sore, tired, burning or itching eyes.
- Watery or dry eyes.
- Blurred or double vision.
- Mild headaches.
- Increased sensitivity to light.
- Difficulty in concentrating.
- Feeling that you cannot keep your eyes open.

The degree and intensity of these symptoms may **vary from student to student**, with the symptoms being more prevalent in students with **photosensitive eyes** which means that bright light sources may hurt their eyes more than usual.

C. Tackling Eyestrain

Here are few quick simple steps to minimize the effects:

1. Decrease overall screen time

The best solution for eyestrain is to decrease and manage unnecessary or non-essential screen time:

1. **Build a schedule.** Structuring **your** day can be incredibly helpful in keeping track of how much **time** you spend on computer/mobile screen
2. Reduce **entertainment and gaming** time
3. **Keep a check** on your ward's non-essential screen time
4. Create **electronic-free zones** (*house-space where no electronic device is allowed*)
5. **Do not** let your ward use any form of technology **before bed**
6. **Set limits** on when and how your ward engages with technology
7. Engage in **digital detoxes** (*compulsory rest/meditation period for your ward*)
8. Make sure your ward stays **physically active** throughout the day

2. Massage/Replenish your eyes

Ask you ward to not only take screen **breaks** but also close his/her eyes. Remember, closing eyes even for five to ten minutes per hour allows your eyes to refocus & your mind to recharge.

Also, use clean fingers to **gently massage the eyelids**, the muscle above the eyebrows, under-eyes and temples. This helps **increase blood circulation** to the eyes & relaxes the muscles around your eyes. It also stimulates the tear glands, preventing dry eyes.

3. Blink more often and lubricate eyes

Decrease in the blinking rate, which is also seen with such activities like driving, reading a book, or watching TV leads to dryness of eyes and eyestrain. So, advise your ward to **blink more often**, you can also use a **washcloth soaked in warm water** on tired, achy eyes. Warm water compress is great way to relax your eye muscles and relieve dry eyes after a long day of staring at computer screens.

Additionally, you can occasionally use **cold water to add moisture** and **ease any eye-pain**. Cold water is effective in improving blood circulation and relaxing strained eyes. It is just like warm water compress method except you dip a soft, clean cloth into cold water instead of warm water. Remember, not to alternate between hot and cold water compress immediately. Give a couple of hours between sessions.

Alternately, you can also use **doctor prescribed eye-drops** to **lubricate** and relax your ward's eyes, hence reducing any symptoms of eyestrain.

4. Adjust room brightness

Not only use of computer, but whether there is adequate light in the room or not, is also associated with dry eye/eyestrain. **Dim lit** or **overly dark room** cause eyestrain problems. This is because a flickering light source leads to constriction and dilation of eye muscles many times quickly and repeatedly. There are muscles involved in this process and, like any other muscle, overuse can be symptomatic leading to eyestrain, headaches, etc.

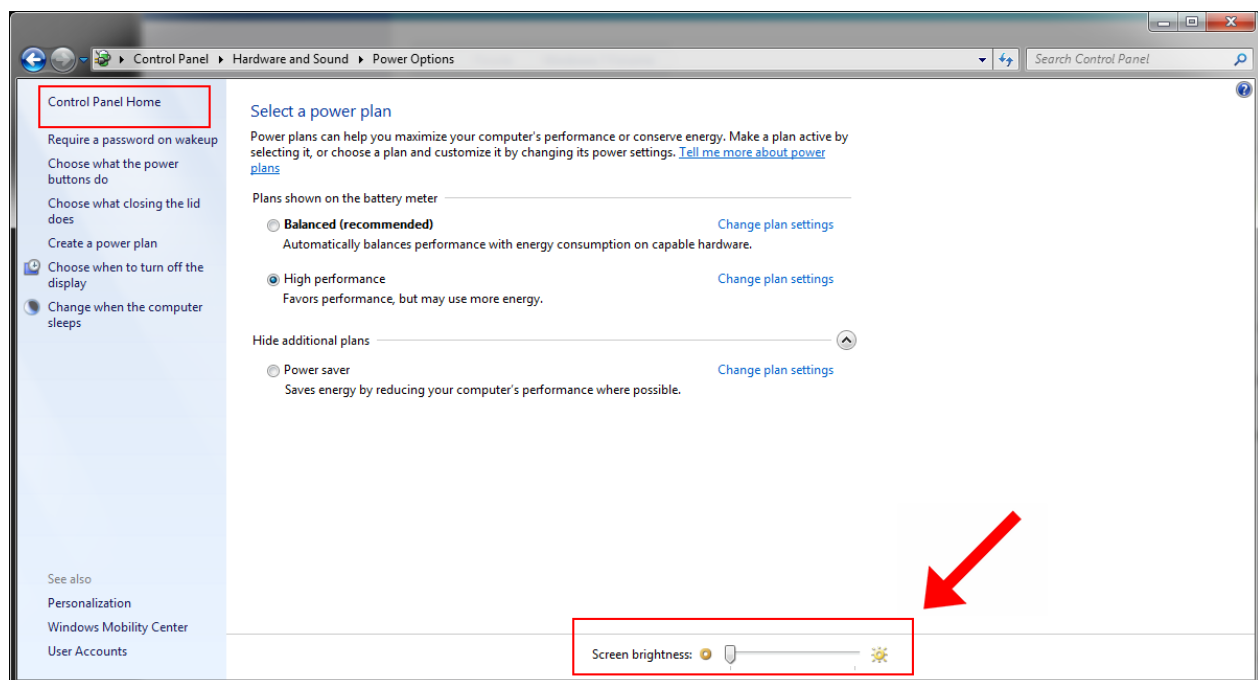
So, a **well-lit room** or **nearby light sources** like a table lamp, computer lamps can be used to reduce problems caused by dimly lit room.

5. Manually adjust monitor brightness & settings

Adjusting the display screen's brightness according to the room brightness will help put less strain on your ward's eyes. Make sure that the display sources are neither overly bright nor overly dim.

To adjust display brightness, you need to open the **Settings app** from your Start menu or Start **screen**, select "**System**," and select "**Display**." Click or tap and drag the "**Adjust brightness level**" slider to **change the brightness level**.

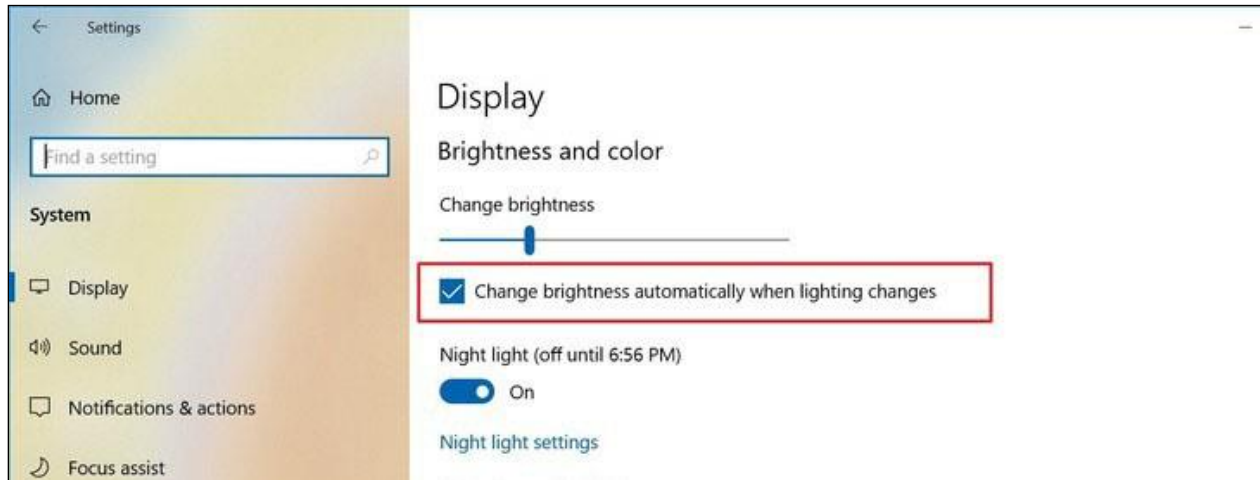
If you are using **Windows 7 or 8**, and do not have the **Settings app**, then this option will be available to you in the Control Panel.



6. Use ambient light feature

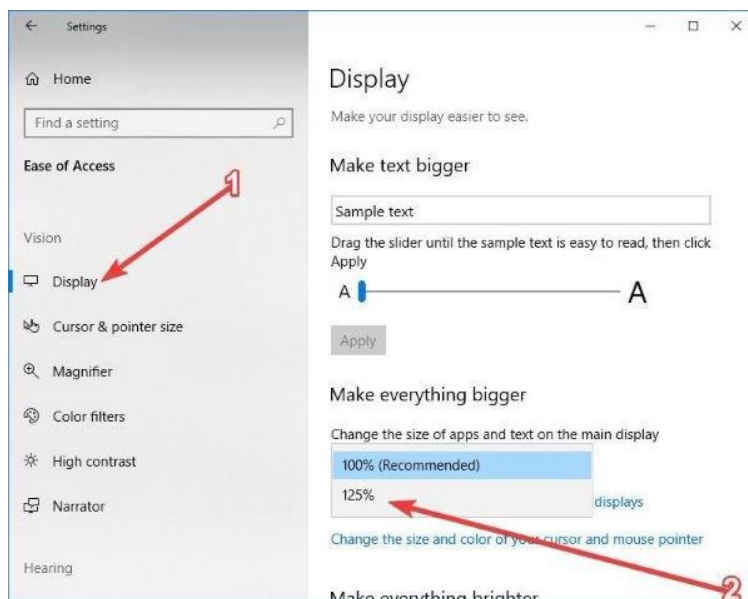
To enable the ambient light feature, you need to browse to the **Settings > System > Display** and then **enable** the '**Change Brightness Automatically when lighting changes**' option.

If your laptop/monitor has an ambient light sensor built in (*which is common nowadays*), then you can use this **Windows 10 feature to dynamically adjust the brightness** of your display according to the light around you for a more consistent viewable experience.



7. Increase text size

Text size may need to be increased for smaller **monitors**. To change your display in Windows 10, select **Start > Settings > Ease of Access > Display**.

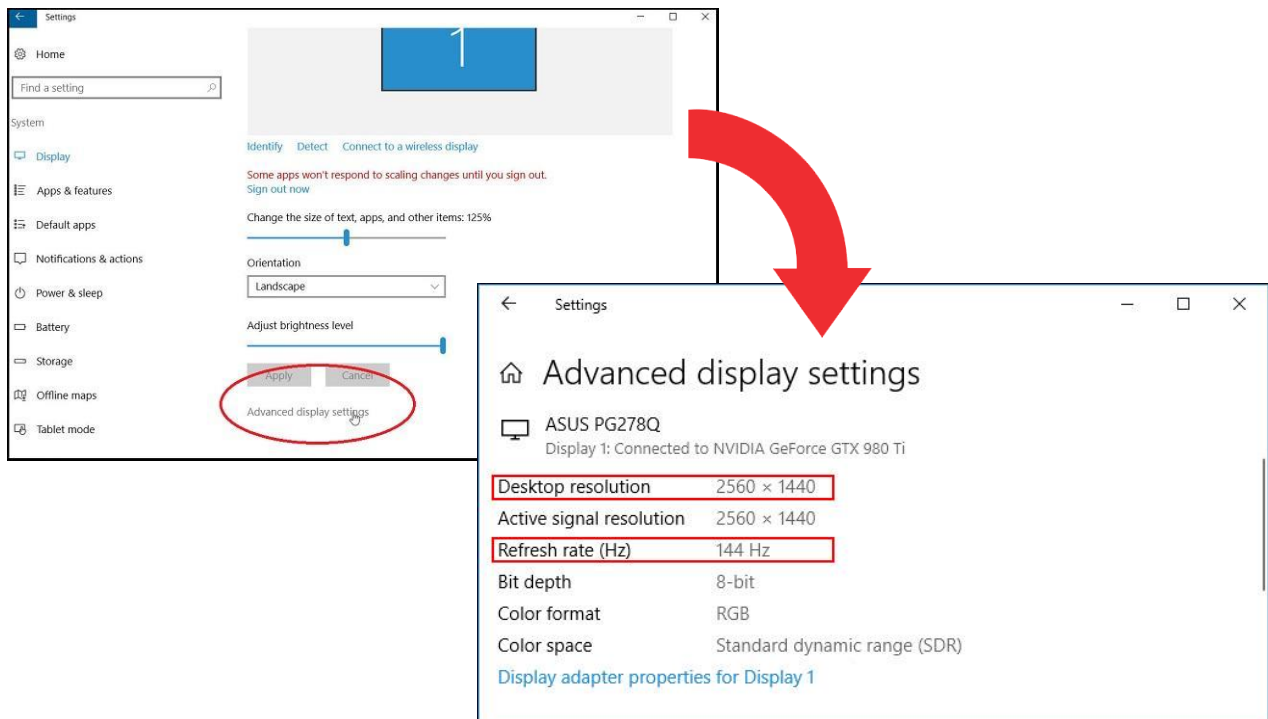


- 1) To make only the **text on your screen larger**, adjust the slider under **“Make text bigger”**.
- 2) To make **everything larger**, including images and apps, choose an option from the drop-down menu under **“Make everything bigger”**.

8. Use flicker-free, high refresh rate monitors

Eyestrain also depends on the **resolution and refresh rate** of the monitor. A higher resolution and refresh rate means a crisper and smoother-looking image/text output that is easier on the eyes.

So, if you are trying to ease your eyestrain, a **resolution of 1080p & refresh rate of 60 Hz** minimum is recommended. If you are unsure about your monitor details, you can use the following method to check out your monitor details, **Select Start > Settings > System > Display** and click on **Advanced Display Settings**



9. Change your monitor type

Eyestrain also depends on the type of monitor you are using. We recommend going in for either an **IPS or TN panel**. Whatever monitor you choose, make sure it has high **quality display screen**, that has a **good viewing angle** and **fast refresh rate**.

TN panels are cheaper than IPS display but **IPS panels have a wider viewing angle**, with better colour/contrast but are also more costly. Alternately, a **1080p @ 60Hz/75Hz** TN monitor from a reputed brand is also a good option for your ward. Always remember, better contrast at a wider viewing angle range, makes it easy for your eyes to register the information easily, thus leading to less eyestrain.

Also, if possible, try to pick a monitor that comes with **anti-reflective, anti-glare coating**, if that is not possible then you can use details mentioned below (Point No. 10).

10. Anti-Glare lamination/screens

An anti-glare coating on the display screen, is a layer of coating that does not reflect light. Please check if the monitor you are using possesses the said coating, if not then you can use either an **Anti-Glare Screen** as shown in **FIGURE A**, or **Anti-Glare Lamination** as shown in **FIGURE B**, for your monitor/laptop screen, this will considerably reduce glare and mirror like reflections; making your screen easier to use in high-glare situations, hence reducing eyestrain.

FIGURE A



FIGURE B



11. Anti-glare lamination/screens for mobile

Matt finish **anti-glare lamination** as shown **FIGURE A**, or matt finish tempered glass screens with anti-glare coating as shown in **FIGURE B**, will ensure that your mobile or tablet device does not reflect bright light, hence putting strain on your ward's eyes.

FIGURE A



FIGURE B



We recommend that you **use matt finish screens** as opposed to the glossy lamination/screens. Matt finish, anti-glare screens have a unique matte coating that is better at diffusing reflective glare, as opposed to glossy ones.

12. Use Digital UV protection eyeglasses

We recommend using **digital UV protection glasses** also known as Computer Vision Lenses, these block blue light from digital devices. **Blue light filtering glasses** with zero power or with prescribed power, will reduce eyestrain, eye fatigue and keep eyes safe from harmful blue rays from all sources.

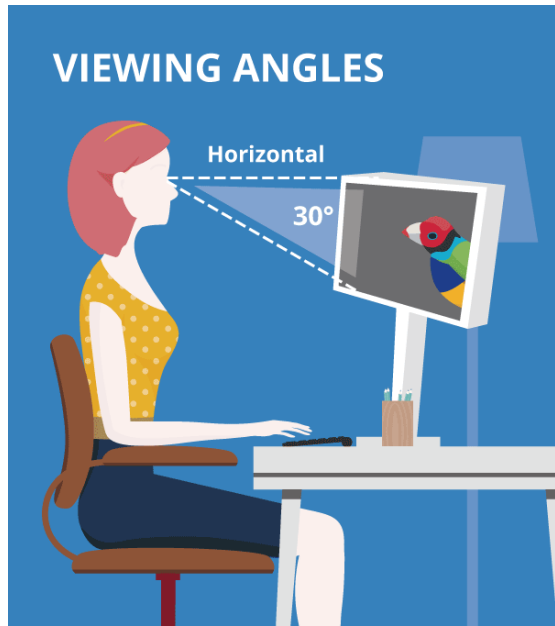


If possible, try to get digital UV protection lenses that come with **Anti-Glare/Anti Reflection**, this will help reduce glare from the display source.

13. Adjust viewing distance & angle

Comfortable viewing distance and angle is very important. So, adjust your monitor distance and angle to further reduce the risk of eyestrain.

Remember, that the top of the screen should be in line with your eye level. If your monitor height cannot be adjusted; you can use **mount arm** or a **stand**. Alternately you



can keep a **small box** or **set of books** to bring your monitor height to eye level.

In addition, the screen should be placed approximately **18-30 inches** from your eye (refer to the figure given alongside).

The screen should also be tilted slightly back – between **15 to 30 degrees** depending on the student's comfort level. This will also ensure that the child does not receive glare from lights in the ceiling.

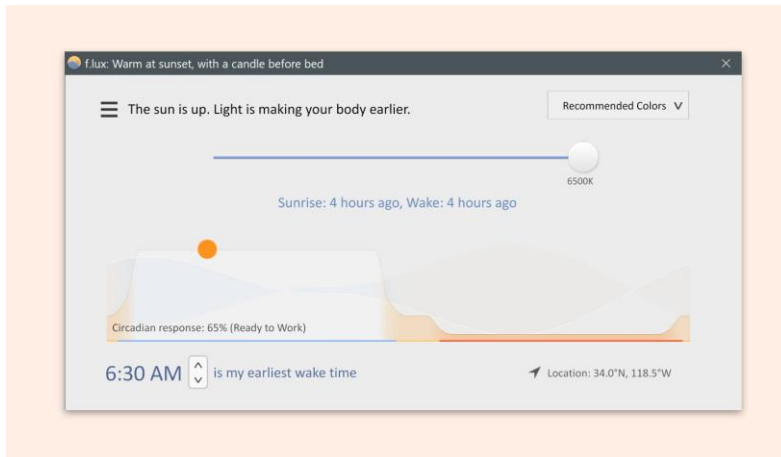
14. Mobile/Tablet stands

Just like computer/laptop, **mobile stand** or **tablet holder** will allow the student to position his device on the desk to help **improve his sitting posture**, while **ensuring that a good viewing angle and distance** is always maintained.



15. For computers use apps like **f.lux**

App like **f.lux** can help students deal with eyestrain if they stare at a screen for too long, these apps can also help reduce disruption of sleep pattern.



f.lux is a handy cross-platform tool, that allows you to adjust the **colour temperature on your display**. It makes the colour of your computer's display **adapt to the time of day**.

Alternately, you can also use apps like **DimScreen**. DimScreen is a **free light weight app** that easily changes the brightness of your screens with simple click or keyboard shortcut.

16. For mobiles use apps like **Night Screen**

You can always employee help of good apps such as **Night Screen**. Night screen's main goal is to **reduce the brightness** of your screen lower than you can achieve with the default settings.

Night Screen applies an overlay filter that acts as a dimmer to darken the screen. It a great app to avoid headache and eye pain in a dimly lit environment or at night.

If you have any doubts, you can contact our IT Cell at:
tech_help@gurukulglobalschool.co.in