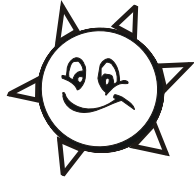


Our eyes can get used to light of various intensities. If we expose ourselves to strong sunlight for a long time or if we need to perform outdoor activities, the light will not only cause tiredness of the eyes, but the harmful light (especially ultraviolet light) that enters our eyes will cause damages. In these circumstances, wearing quality sunglasses is the best way to protect our eyes.



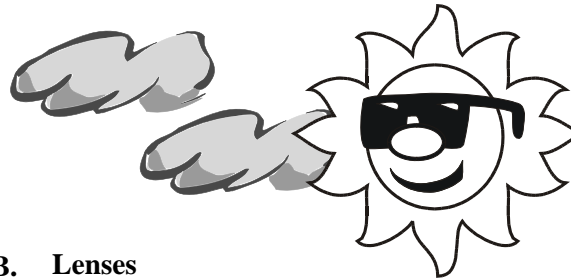
Tips to choose sunglasses

A. Frame

1. **Frame size:** The frame size should match the size of your face and head. A tiny frame cannot keep out the sunlight from above or sideways effectively, and an oversized frame is heavier and less attractive
2. **Width of the arms:** The arms of the sunglasses should not be too wide, or your vision on both sides will be affected
3. **Nose pads:** Student with a flat nose should choose a frame with nose pads in order to fix the position of the frame and keep it from slipping down. Nose pads can also keep the frame from getting too close to the face and reduce the chance of skin allergy or discomfort
4. **Storage:** When you are not wearing your sunglasses, put them in a case properly. Exposing your sunglasses to intense sunlight for a long period of time may cause deformity of the frame and fading of colour

5. Materials of the frame:

Metal frame	Plastic frame
⊗ thinner and easily deformed	☺ less easily deformed
⊗ surface of frame is easily corroded by sweat and cause skin allergy	☺ seldom cause skin allergy, suitable for students who sweat a lot
☺ the frame is further away from the face, and so more comfortable	⊗ the frame is closer to the face if without nose pads
☺ most have nose pads which can be adjustable according to the height of nose bridge	⊗ most are without nose pads, so the nose bridge has to support the frame directly with little room for adjustment



B. Lenses

1. The essential function of sunglasses is to block the sunlight, so the selection of the lenses is more important than the frame.
2. The lenses of sunglasses must be able to block all the ultraviolet rays. Producers usually put a label marked "UV 400 nm" or "100% UV absorption" to indicate that their lenses can block all the ultraviolet (UV) rays.
3. Generally, sunglasses should be able to block 70% to 90% of the total sunlight. The more intense the sunlight or the longer you stay under the sun, the lower the index of light transmission should be. Remember that the shade of the lens' colour is not related to UV light filtering ability

4. Grey, dark green or brown lenses are preferable as they have stronger ability in blocking sunlight
5. Original lenses of sunglasses are without prescription. People who have nearsightedness, farsightedness or astigmatism need to change the original lenses to lenses with prescription
6. Classifications of lenses

Classification (1): Plastic lenses, Glass lenses

Plastic	Glass
☺ shatter-resistant, more suitable for students	⊗ fragile
☺ lighter and more comfortable	⊗ heavier, but the edge of lens is thinner and looks better
⊗ easily scratched	☺ less easily scratched, more durable
☺ can be tinted into various colours and shades	⊗ only brown lenses with different shades
☺ can be coated with a layer of UV-resistant film to filter out UV rays	⊗ cannot add a layer of UV-resistant film, so less able to block UV rays. Only suitable for occasions where the sunlight is not very strong

Classification (2): Lenses have different tints, suitable for different environments

Use \ Colour	Grey	Brown	Greenish-grey	Yellow
Under strong sunlight	✓	✓	✓	
Cloudy day				✓
Cycling/daytime driving	✓	✓	✓	
Swimming, windsurfing and fishing	✓			
Playing golf		✓		

Classification (3): Single coloured, Double coloured, Photochromic, Polarized and Metallic mirror coated lenses

Single coloured	Double coloured	Photochromic	Polarized	Metallic mirror coated
<ul style="list-style-type: none"> • Same light transmission for every part of the lens • Most popular 	<ul style="list-style-type: none"> • Including two types: Lenses with a gradual change to lighter shade from top to bottom; suitable for reading the dashboard while driving Another type has lighter shade in the centre; suitable for skiing, water-skiing or sailing because the dark colour at upper and lower part can block the sunlight reflected from snow or water 	<ul style="list-style-type: none"> • Lenses change gradually to a darker shade when receiving UV ray from sunlight • Not suitable for long exposure under strong sunlight, because even at its darkest shade, the lens can only block out about 50% of sunlight • Lenses gradually change back to a lighter shade indoor, but at its lightest shade, it still has a tint of pale yellow 	<ul style="list-style-type: none"> • Selectively block the sunlight reflected from snow, water or sand • Suitable for skiing or water sports 	<ul style="list-style-type: none"> • A thin layer of silver film is added to increase the ability of sunlight reflection • Suitable for places with very strong sunlight • The metallic coating gets worn easily and detaches from the lens

Sunglasses and You

