Project is aimed at improving the eye health of children across Greater Manchester by increasing awareness of the importance of regular eye testing from childhood.

The treatment of eye problems can have a positive impact at school resulting in better behaviour, improved concentration, higher academic and sporting performance and greater social interaction.

This lesson plan has been designed for use with primary school children in year 5 and 6 but may be adapted for younger children.

It is really important to us to be able to evaluate the success of our project and learn from our users. We would like you to ask the children how many of them have had an eye test both before the lesson is delivered and 4-6 weeks later. Please email your results to us using england.gmtop@nhs.net.

Thank you for your support.
Lesson Plan

Lesson Objectives
1. Name the parts of the eye.
2. Understand how the eye works using light.
3. Understand why good eyesight is important.
4. Know what to do to keep their eyes healthy.

Related Units
Science: How the brain and senses work.
PHSE: Promotion of eye health and how to look after their eyes.

Task 1: How the eye works and the parts of the eye
1. View the short presentation from the Children's University of Manchester (see resources).
2. Complete the short quiz at the end of the video on parts of the eye.
3. Label a picture of the parts of the eye. This can either be done interactively as a class using the slide included in the presentation OR you could make a handout with pictures of the eye and the names scattered around it and ask the children to link the names to the correct parts of the eye OR ask the children to draw an eye and name the different parts.

Task 2: Explanation of eye health and how to look after your eyes
1. View the short PowToon on the importance of eye health (see resources).
2. Encourage children to discuss the symptoms some children might have. Why is sight important? What can they do to keep their eyes healthy?
3. You might also want to show them what happens when they have an eye test: The college of optometrists has a video of Robert aged 8 having his eyes tested (see resources).

Fun Task 3: Animal Eye facts quiz
1. Children can work in teams or individually on this quiz and have fun finding out the answers.

Homework
1. Ensure the children take home a leaflet on eye health and encourage their parents to take them for an eye test if they have not already done so.
2. Ask them to redraw and label the parts of the eye.

Resources:
1. Childrens University of Manchester: www.childrensuniversity.manchester.ac.uk/interactives/science/brainandsenses/eye/
2. Powtoon: www.powtoon.com/c/d4qCZn8Ym42/1/p
3. Eye Health Leaflet
4. Animal Eye facts quiz
5. College of Optometrists video of Robert age 8 having his eyes tested: www.youtube.com/watch?v=wwEsOWRoNH8
Animal eye facts

1. How many eyes does a jumping spider have?
   a) Two  
   b) Four  
   c) Eight

2. Which animal can look in two different directions at the same time?
   a) A camel  
   b) A chameleon  
   c) A cat

3. How many eyelids does a tiger shark have on each eye?
   a) One  
   b) Two  
   c) Three

4. From how far away can an eagle spot a rabbit?
   a) 300 metres  
   b) 3,200 metres  
   c) 5,100 metres

5. In an ostrich which is bigger – its eye or its brain?
   a) Its eye  
   b) Its brain  
   c) Neither, they are same size

6. How many eyes does an earthworm have?
   a) None  
   b) Two  
   c) Six

7. How long are a camel's eyelashes?
   a) 3 centimetres  
   b) 5 centimetres  
   c) 10 centimetres

8. Which animal can sleep with one eye open?
   a) Crocodile  
   b) Fox  
   c) Tiger

9. Which animal has the largest eyeball?
   a) Elephant  
   b) Blue whale  
   c) Giant squid

10. What is the shape of a horse’s pupil?
    a) [ ]  
    b) [ ]  
    c) [ ]
How many eyes does a jumping spider have?

- **c) Eight**
  Jumping spiders have eight eyes like most spiders, four on its face and four on the top of its head. Although some spiders can only see the difference between light and shadow, jumping spiders are believed to have excellent eyesight.

Which animal can look in two different directions at the same time?

- **b) A chameleon**
  A chameleon can look in opposite directions at the same time! Each eye can move separately from the other one, allowing the chameleon to observe two different objects at the same time without moving its head.

How many eyelids does a tiger shark have on each eye?

- **c) Three**
  Tiger sharks have three eyelids on each eye. The upper and lower lids, which don’t fully close over the eye, and a third inner lid which slides horizontally to protect the eyes, especially while biting prey and eating. Other animals that also have a third eyelid include chickens and hares.

From how far away can an eagle spot a rabbit?

- **b) 3,200 metres**
  Eagles can spot a rabbit from over three kilometres away. Their eyes have special retinas that allow them to see almost eight times better than humans and help them see small rodents from high above, thus the expression ‘to have an eagle eye’!

In an ostrich which is bigger – its eye or its brain?

- **a) Its eye**
  An ostrich’s eye is bigger (and weighs more) than its brain!

How many eyes does an earthworm have?

- **a) None**
  An earthworm has no eyes but hundreds of tiny cells which can detect light called eye spots. These eye spots are around its head and tail, allowing the worm to sense light and dark.

How long are a camel’s eyelashes?

- **c) 10 centimetres**
  A camel’s eyelashes can be as long as 10 centimetres to protect its eyes from wind-blown sand in the desert.

Which animal can sleep with one eye open?

- **a) Crocodile**
  Crocodiles can sleep with one eye open, in fact, one half of their brain stays ‘awake’! Scientists believe this helps them stay alert to threats (and prey) at all times, so watch out! Other animals that sleep with one eye open include bottlenose dolphins and blackbirds.

Which animal has the largest eyeball?

- **c) Giant squid**
  The giant squid has the largest eyeball in the animal kingdom. On average it measures about 28 centimetres across, roughly the size of a football or a watermelon or your dinner plate!

What shape is a horse’s pupil?

- **a) (Horizontal ellipse)**
  Horses have horizontal slit pupils that allow them to see a very broad field of landscape, much like a camera’s wide-angle lens. This is useful for spotting predators.