PIANIFICAZIONE DEL MODULO CLIL

Insegnante: Adelina Rosamilia con la collaborazione della collega di team Chiara Mori

Scuola Primaria G. Pascoli, IC Cervia 2

Classe 5^ B

Titolo del modulo: "The Human Eye"

Discipline coinvolte: scienze, tecnologia, immagine, inglese

Prerequisiti disciplinari	Conoscere le principali caratteristiche del corpo umano e le sue parti conoscere i cinque sensi
Prerequisiti linguistici	comprendere globalmente messaggi semplici Porre e rispondere a semplici domande Conoscere il presente semplice, gli aggettivi, le preposizioni. Usare le short answers

Obiettivi didattici disciplinari	1. Conoscere le parti dell'occhio e il suo funzionamento
Obiettivi linguistici	1. Conoscere il lessico relativo alle parti dell'occhio. 2. Rispondere a semplici domande relative l'argomento trattato. 3. Descrivere con semplici frasi il funzionamento della vista. 4. Potenziare i prerequisiti linguistici
Obiettivi trasversali	1. Collaborare con i compagni per un progetto comune. 2. Produrre un cartellone

Abilità coinvolte:

ricettive (ascolto e lettura), produttive (scrittura, produzione orale).

Contenuti

1. Titolo "The Human Eye"
   Argomento: l'occhio umano e la vista

Tempi: 6 ore più i tempi di progettazione, preparazione dei materiali e di verifica.

Metodologia: lezione frontale con utilizzo di letture e immagini; lezione partecipata con giochi a coppie o a squadre, lezione cooperativa per realizzare un poster.

Strumenti: testi, immagini, schede, quaderno, video, computer, internet, lavagna interattiva

Modalità di verifica: orale, scritta, autoverifica degli alunni tramite questionari.

Recupero: se necessario, in piccoli gruppi tramite tutoraggio fra pari.

Pianificazione dell'Unità di Apprendimento

"The Human Eye"

Destinatari: classe 5^ B

Durata del modulo: 6- 8 ore

Eventuali note sulla pianificazione e realizzazione:

La classe si compone di 17 alunni, 10 femmine e 7 maschi con 28 ore settimanali. In questa classe io sono l'insegnante di matematica, scienze, tecnologia e inglese. Conosco e ho utilizzato il metodo Clil presente nel libro di testo della Oxford "New Treetops".

Alcuni siti di riferimento	nei.nih.gov; cyh.com; sciencewithme.com; childrensuniversity.manchester.ac.uk; sciencekids.co.
Bibliografia di riferimento	"New treetops 5" di Sarah M. Howell, Lisa Kester-Dodgson, Oxford

1. **FASE DI MOTIVAZIONE**

Numero attività	Descrizione attività (pre-task) 2 ore
Attività 1	L'insegnante ricorda la metodologia Clil incontrata in alcune pagine del libro di inglese già svolte. allegato 1 e 2
Attività 2	L'insegnante mostra video e immagini; fornisce informazioni e il lessico relativo all'occhio utilizzando le strutture linguistiche necessarie.
Attività 3	Lettura di informazioni scientifiche e curiosità sull'occhio umano. Allegati 3, 4, 5,6

1. **FASE DI GLOBALITÀ**

Numero attività	Descrizione attività (pre-task) 2 ore + lavoro a casa
Attività 1	Lettura e comprensione di schede esplicative sulle parti dell'occhio e una sul suo funzionamento in base agli obiettivi previsti. Allegati 3, 4, 5, 6 I bambini disegnano l'occhio e il bulbo oculare sul quaderno trascrivendone le parti che lo compongono. Completano una scheda (Allegato 7). Cercano, a coppie, informazioni nel testo per rispondere ad alcune domande di comprensione del testo (allegato 8)

2. **FASE DI ANALISI**

Numero attività	Descrizione attività (task- cycle) 2 ore
Attività 1	Gli alunni verranno suddivisi in quattro gruppi ; ogni gruppo

	descrive una parte dell'occhio e i compagni degli altri gruppi devono cercare di indovinare la parte descritta.
Attività 2	Gioco dell'identikit: disegnare gli occhi di un compagno seguendo precise indicazioni dettate da un altro compagno.
Attività 3	Creare dei giochi linguistici come word search, scramble word, acrostic, dominoes.

3. FASE DI SINTESI

Numero attività	Descrizione attività (task-cycle) 2 ore
Attività 1	Realizzazione di un poster con disegni e didascalie

4. FASE DI VERIFICA E CONTROLLO

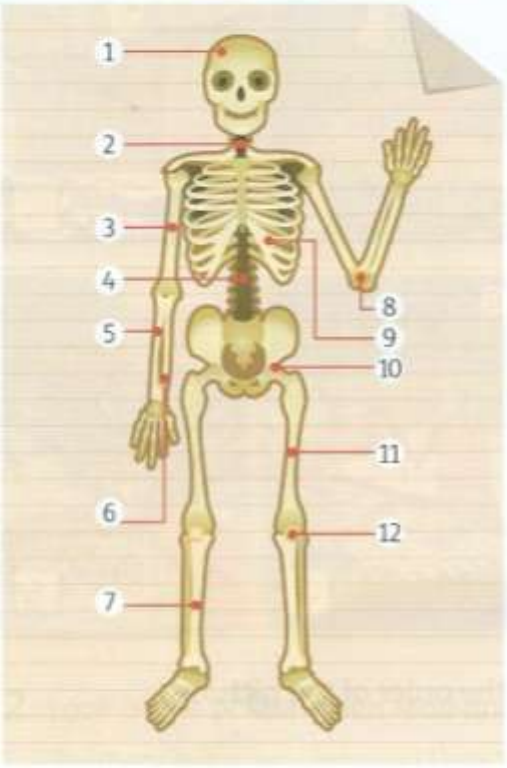
Numero attività	Descrizione attività (post-task) 30 minuti
Attività 1	Attività 2 L'insegnante ricapitola i contenuti fondamentali e gli aspetti linguistici appresi
Attività 2	L'insegnante somministra un test agli alunni che, individualmente, lo completeranno. Allegato 9
Attività 3	Durante la fase del task l'insegnante osserva ogni alunno e completa la griglia di valutazione. Allegato 10

Allegato 1

The body

1 Listen and repeat. 3 Look and write the bones in blue and the joints in red. Then write the muscles and colour them.

elbow radius tibia knee femur ulna ~~neck~~ humerus
backbone hip ribs ~~skull~~ biceps triceps quadriceps heart



1 skull
2 neck
3 _____
4 _____
5 _____
6 _____
7 _____
8 _____
9 _____
10 _____
11 _____
12 _____

biceps = ■
triceps = ■
quadriceps = ■
heart = ■

13 _____ 15 _____
14 _____ 16 _____

The skeleton supports our body. Muscles help us move.
Joints connect the bones and help the skeleton move.

Allegato 2

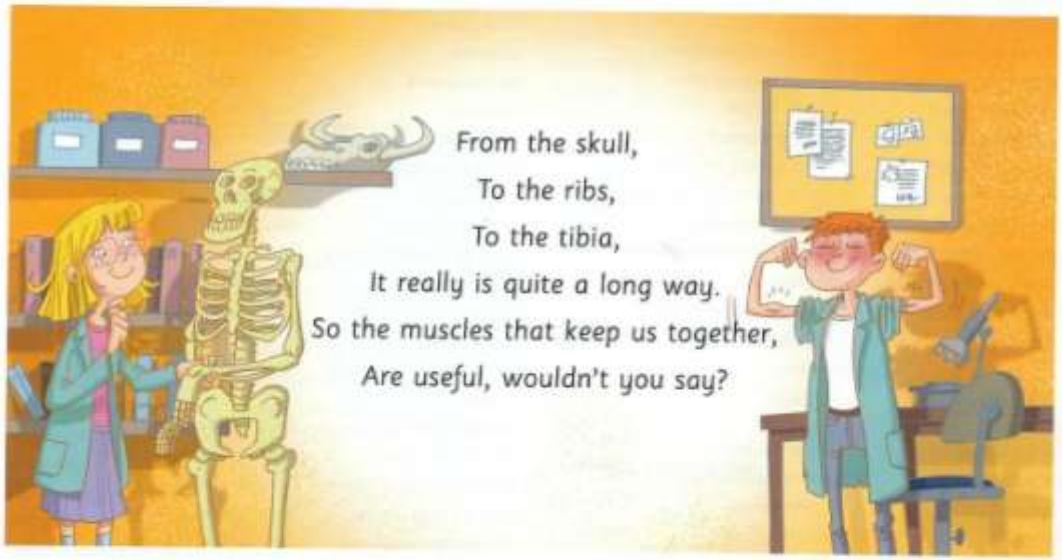
2 Look at the poster. Then read and complete the text.

radius involuntary joints ~~bones~~ tibia can't ear skull

There are 206 (1) bones in the human skeleton. The skeleton supports our body and protects our organs. The bone in our head is called the (2) _____. The bones in our body are the backbone and the ribs. The (3) _____ is in our arms and the femur and (4) _____ are in our legs. The smallest bone is in the (5) _____.

Our bodies also have muscles to help us move. There are voluntary and (6) _____ muscles. We can control voluntary muscles, but we (7) _____ control involuntary muscles. The biceps, triceps and quadriceps are voluntary muscles. The heart is an involuntary muscle. Our (8) _____ are important, too! They connect the bones and help the skeleton move.

3 Learn and say the poem. 3



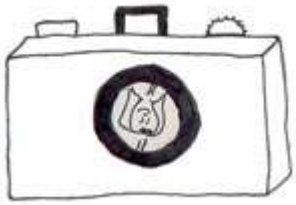
4 Make a picture of the human body. Describe it to a friend. *See Manuale.*

Allegato 3

Eyes - how your eyes work

Your eyes are like a wonderful kind of camera.
They take pictures of the world around you and send the pictures to your brain. Your brain works out what your eyes are seeing. This happens from the moment that you open your eyes in the morning to when you close your eyes at night.

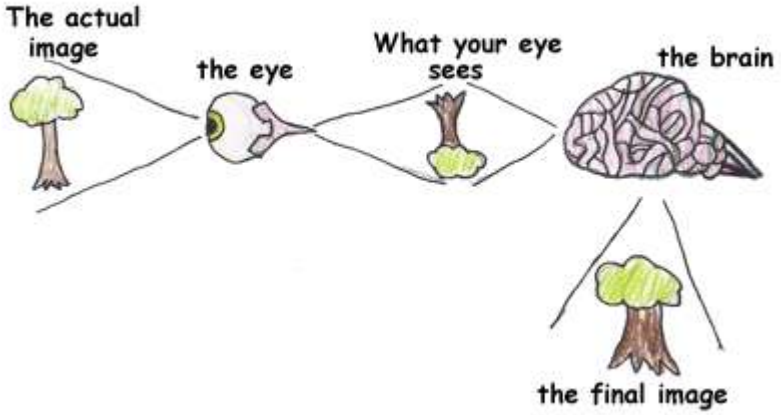
How a camera works



The light rays from an object pass through the lens of the camera and get recorded on a film or a computer chip.
Do you notice something about this drawing? Yes, the picture that is recorded by the camera is upside down (of course, when you look at the picture as a printed photo or on a computer screen, it is not upside down.)

How your eyes work

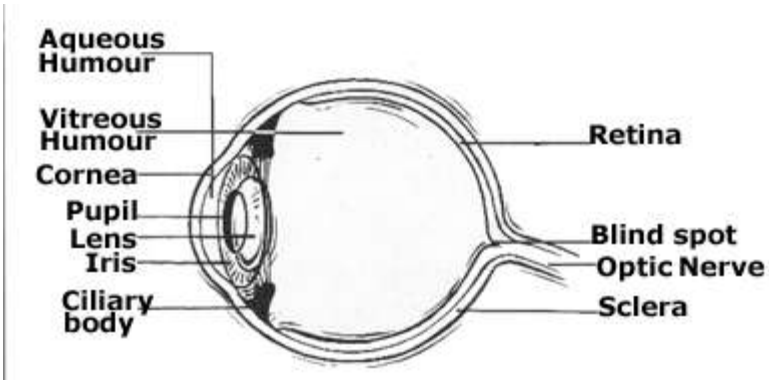
Your eye works in a similar way to a camera - light passes through the lens of your eye and is 'recorded' on the back of your eye (the retina).



Do you notice something about this drawing? Yes, the picture that your eye takes is upside down too!
Why don't you see things upside down?
Well, your eye sends the picture to your brain, and your brain turns the picture the right way up and tells you what you are looking at. So you see things the right way up.
Inside your eye

Allegato 4

What are the parts of your eye and what do they do?



Cornea (Cor-nee-a)

This is the see-through skin that covers the front of your eye. It is clear like glass and it has no blood vessels in it.

Sclera (Sk-ler-a)

This is the tough skin which covers the outside of the eyeball (except for the see-through cornea). We call it the 'white' of the eye.

Iris (eye-ris)

The iris controls the amount of light that enters the eye. The iris is the coloured part of your eye.

Pupil (pew-pil)

This is the hole in the coloured iris. It lets light into your eye. It gets very small in bright light, and bigger in dull light.

The lens

The lens focuses light onto the retina. It changes shape to make sure that the 'picture' on the retina is as clear as possible.

Retina (Ret-in-a)

This is like a movie screen which shows the picture you are seeing - upside down, remember? The retina has two lots of cells called 'rods' and 'cones' (because that is what they look like.) Rods can 'see' black and white. Cones can 'see' colours. They turn the picture into an electrical message for the brain. Sometimes people don't see all the colours (colour blindness).

Blind spot

This is a bit of your retina which is not sensitive to light because there are no rods or cones there. It is the spot where the optic nerve is joined on to the retina.

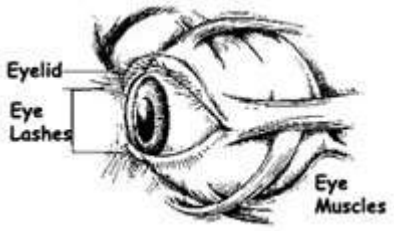
Allegato 5

Optic nerve (op-tic)

The electrical messages from the retina travel along the optic nerve to your brain. It's a bit like the cable that carries all the TV pictures from your aerial to your TV so that you can see the programs.

The great thing is that our eyes take these 'movies' all the time and we don't need any film or camera.

Eyelids and Eyelashes



These protect your eyes. The eyelids can shut out light so that you can sleep. They will shut very fast if they feel something that is trying to get into your eye.

Eyelashes

Eyelashes are very sensitive, and if they feel dust coming they trap it as your eyelids close.

Eyebrows

Eyebrows also help to keep dust and sweat out of your eyes.

Tear glands

These are small glands inside your upper eye lid. Their job is to make tears to keep the surface of your eyeball clean and moist, and help protect your eye from damage.

When you blink, your eyelids spread the tears over the surface of the eye. Small things that are on your eye (like specks of dust) wash into the corner of your eye next to your nose. Sometimes tears flow over your lower eyelid (when you cry, or you have hay fever), but mostly the tears flow down a tiny tube at the edge of your lower eyelid, next to your nose. (If you look very carefully you can see a tiny dot that is the beginning of that tube). This tube carries the tears to the back of your nose (and this is why your nose 'runs' when you cry!)

Conjunctiva (con-junk-ty-va)

This is the lining on the inside of your eyelid and the outside of the front of your eye (except for the special skin of the cornea). You can see some tiny blood vessels on the conjunctiva over your eye. If your eyes get sore, these blood vessels get bigger and your eye looks red.

There are two lots of fluid in the eye.

Aqueous humour (ak-we-us)

Aqueous means water, and humour means fluid. This watery stuff fills the front of the eyeball around the lens.

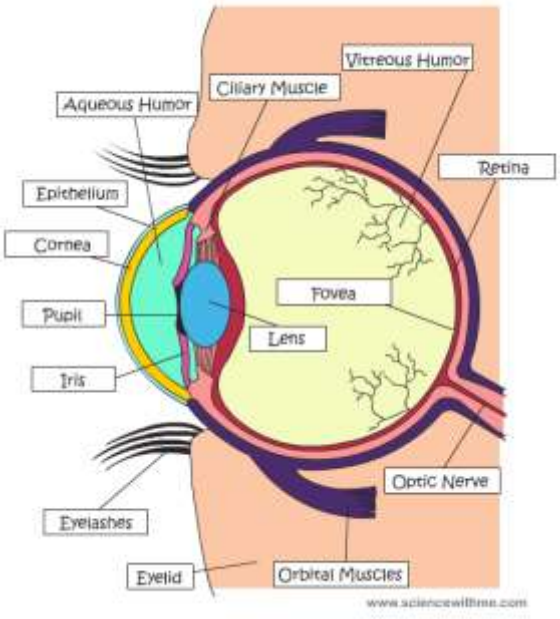
Vitreous humour (vit-re-us)

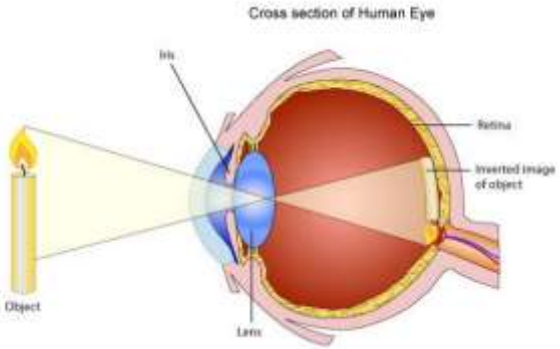
This is a thicker jelly-like liquid which fills the larger part of the eyeball and keeps it in shape. (Vitreous means glassy, because the vitreous humour is very clear, so that light can pass through it).

Allegato 6

Ciliary muscles (sil-e-re)
These are a circle of tiny muscles around the lens. They change the shape of the lens by squeezing and relaxing. They squeeze (making the lens fat) to look at nearby objects, and relax (making the lens thinner) for far away objects.

Your eyes are very beautiful and also very clever, because all the different parts work together to help you see.





- Your eyeball is about 1 inch across and weights approximately 28 grams; It is soft like jelly. Inside your eyes are blood vessels.
- Corneas are the only tissues that don’t require blood.
- Some people are near-sighted or far-sighted. People who are near-sighted can’t see things far away. People who are far-sighted can’t see things close up. This happens because the eyeball is too long or is flattened. Wearing glasses or contacts can fix these problems.
- I guess you've noticed that your eyes blink rather regularly. Most people blink about twenty-five times a minute while they are awake. Tear glands in the outside corners of

your eyes are always making tears, and the blinking of your eyelids wipes them away. That keeps the front surfaces of your eyes moist and clean.

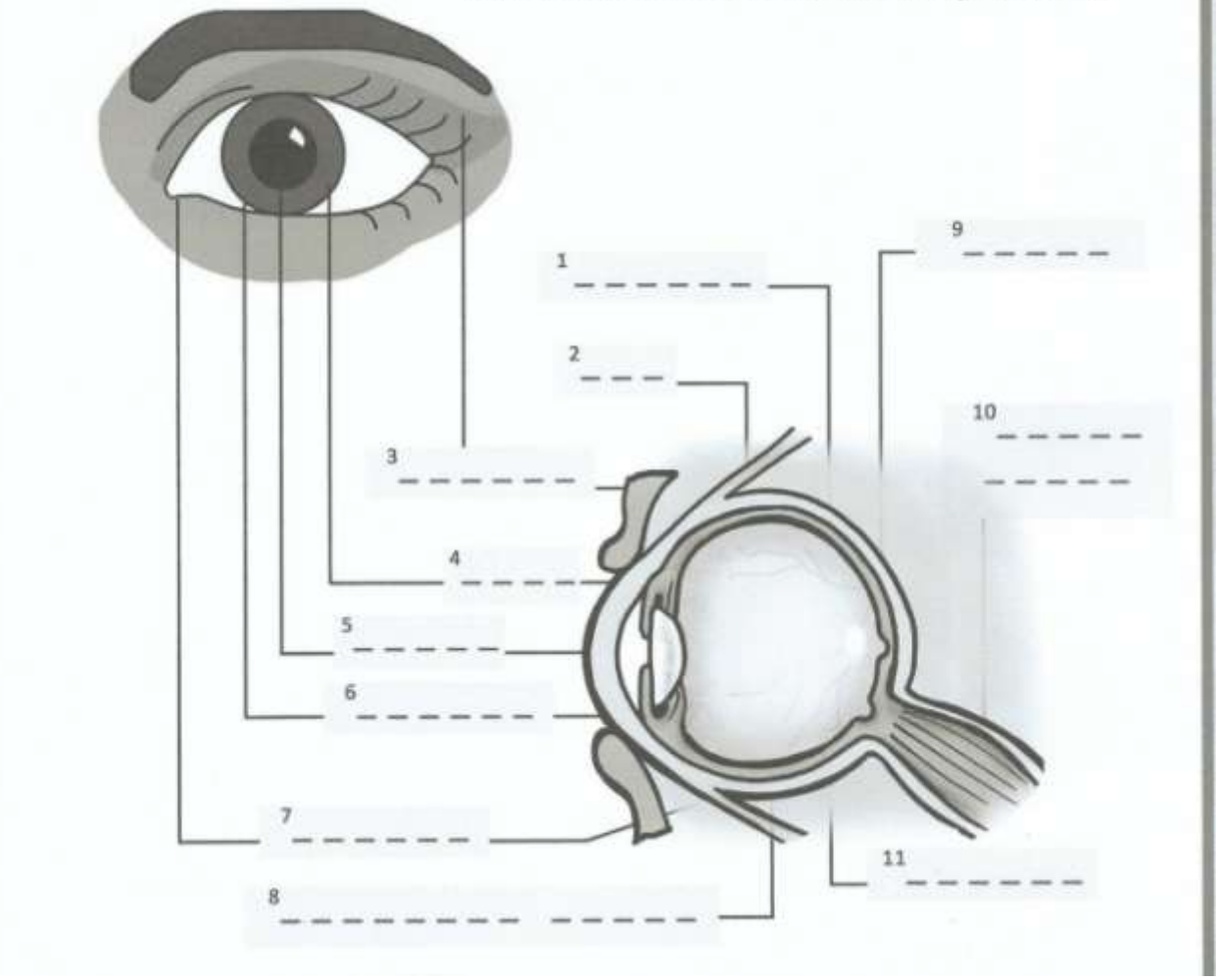
- Blinking is controlled by a reflex, an automatic nerve action. Besides making your eyes blink regularly, the automatic control also works to close your eyelids when something is about to strike your face. So blinking is important in protecting your eyes.

- The muscle that lets your eye blink is the fastest muscle in your body: it allows you to blink five times a second.

Allegato 7

Diagram of the Eye With Matching Terms

Directions: Fill in the correct terms in the spaces below.



Allegato 8

Read and answer the questions

1. Which parts of your body are used to see?
2. Is the eyeball spherical like a ball?
3. What is the coloured part of the eye?
4. Where is the pupil and what colour is it?
5. What is the cornea?
6. What is the sclera?
7. What is the retina?
8. Where is the lens?
9. Which part of the eye lets light in?
10. What does retina contain?
11. How is the picture "recorded" in the retina?
12. Which nerve carries messages from the eye to the brain?
13. Does the human eye work like a camera?
14. Why do we blink?
15. Where are the tear glands?

Allegato 9

TEST

Read and match

1. The parts of our body that we use to see	A. protect the eyes
2. The iris controls	B. along the optic nerve to the brain
3. The eye works in a similar	C. our upper eye lid
4. Eyelids and eyelashes	D. Clean and moist
5. The picture that our eye takes is	E. are eyes and brain
6. The pupil gets very small in bright	F. onto the retina
7. The retina has two lots of cells	G. with the eyes open
8. The electrical messages from the retina travel	H. can't see things far away
9. The lens focuses light	I. that don't require blood.
10. There are small glands inside	J. the amount of light that enters the eye
11. Corneas are the only tissues	K. twenty-five times a minute
12. Tears keep the surface of our eyeball	L. upside down
13. It is impossible to sneeze	M. called rods and cones
14. People who are near-sighted	N. light and bigger in dark light
15. People can blink about	O. way to a camera

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Allegato 10

Osservazione e valutazione

	Basso	Medio	Alto
Conoscere le parti dell'occhio (ob. disciplinare 1)			
Conoscere il funzionamento della vista (ob. disciplinare 2)			
Produrre e scrivere correttamente i vocaboli relativi all'argomento trattato (ob. linguistico 1)			
Saper rispondere a semplici domande (ob. Linguistico 2)			
Descrivere con semplici frasi il funzionamento della vista (ob. linguistico 3)			
Sa collaborare nello svolgimento dei compiti secondo il proprio ruolo (ob. Trasversale 1)			
Sa realizzare un cartellone (ob. trasversale 2)			

	Basso	Medio	Alto
Conoscere le parti dell'occhio (ob. disciplinare 1)			
Conoscere il funzionamento della vista (ob. disciplinare 2)			
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Sa realizzare un cartellone (ob. trasversale 2)			