Please answer the following questions while watching the video about the evolution of the eye. This will be counted as part of your course mark.

1. Sharpest eyes belong to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. The larger the animals eye the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ its vision.
3. Eagle can magnify its helpless prey \_\_\_\_\_\_\_\_\_\_ x compared to the human eye.
4. What happens when a jelly fish is subjected to green light waves? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. What happens when a jelly fish is subjected to purple light waves? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



1. Trilobites from the Cambrian times are the first sign of what type of eye? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ eyes. Their eyes are made of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. This calcite mineral is secreted from their skin.
2. The most abundant (numerous) lifeform on land is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. A bee has \_\_\_\_\_\_\_\_\_\_ lenses per eye. The \_\_\_\_\_\_\_\_\_\_\_\_fly has 29 000 lenses making for the ultimate motion detector.
3. The vertebrate eye are those with a backbone this includes reptiles, mammals and \_\_\_\_\_\_\_\_\_\_\_\_.



1. Carnivorous dinosaurs are great predators due to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ vision that is two eyes are more forward. This advantage is very good for making fine depth judgement and 3D vision.
2.  Allosaurus does not have binocular vision. They have lateral facing eyes which make them an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ predator whereby they wait and take out their prey.
3. Rabbit eyes sit high and to the sides. This allows it to see \_\_\_\_\_\_\_\_\_\_\_ degrees.
4. Nocturnal animals can see during the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. When comparing eye balls of a night time animal with a day time animal, the main difference is the size of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The cornea is a clear curved shell that provides focusing power.
5. Cats like lions are good night hunters because of their eye shine. The cat’s eye when dissected reveals a layer behind the retina called the **tapetum lucidum** which is latin for “bright \_\_\_\_\_\_\_\_\_\_\_\_\_”. Cats only need \_\_\_\_\_\_\_\_\_ of the light that humans need to be active in the dark.
6. Why was it important for primates like the monkeys to have eyes that evolved to see the colour red?