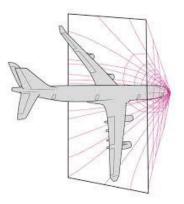
## Copycat the spider

The spider makes their own web. They use the spindles to make the threads.

## **Cross spider**



- 1. The glass container contains spiders. These are Daddy Longleg Spiders. They use their web to catch insects and larva.
  - a. Place the container with a spider in the middle of the table so everybody can have a good look.
  - b. What do you think shall happen if we throw in a larva /maggot?
  - c. One of you can try. Take care that the spider doesn't escape. In the meantime you can make the other assignments and look now and then at what the spider does.
- Perhaps you do not expect it, but the spiderweb is very strong. Suppose you can make a big spiderweb with threads of 1 cm thick. This web can stop an aeroplane. On the bulletin bord you can find more information.
- 3. You can not see a spiderweb very easily. It is however remarkable that birds never fly into a spiderweb. It seems that the threads of a web contain something that reflects ultra violet (UV) light. Birds are able to see this light, but humans can not. This is why birds do not fly into the web.



What is UV light.

Sunlight contains all the colors of the rainbow. When the sunlight shines on a green plant all colors are absorbed by the plant except the green light. The green light will reflect. That is why we see a plant as green.

Sunlight also contains UV light. When we shine a special UV lamp on a subject that reflects UV light it wil be reflected in a visible way.

4. In the black box hangs a spiderweb, With the special UV lamp you can make it visible. Shine the lamp through the opening of the box. This is the way a bird sees the web.



Don't forget to look at the spider!

5. Birds often fly against the glass of high buildings Nowadays the glass windows are often covered with a layer that reflects UV light. The bird will notice the glass and the people in the building won't notice any difference. How many bird stickers are there on the window in the classroom?



6. Take the special UV pen and write down what you want most in life. Or what you wanted to be when you were young. Only the birds can see what you have written. Put your paper in the treasure box. At the end of the lesson we shall make some notes visible.



