SPIDERS,FLIES,GRASSHOPPER,DRAGONFLY.

FLIES

Flies have one pair of wings. They feed from anything sweet, milk, meat, excrement and garbage. First they vomit on the food to liquify it to make it easier to absorb. They breed and lay their eggs throughout the summer. Female lays her eggs in batches of 100-150 on any exposed meat or dung. Eggs hatch in two days as maggots that burrow into the dung where they feed for a week, going through three moults. They then dig down into loose soil to develop into pupae, protected by a hard barrel shaped case. After one to three weeks the adult fly emerges from the pupa case, works its way out of the soil, spreads and dries its crumpled wings and flies off. Most flies die by October but some overwinter in houses or fermenting rubbish dumps to maintain body temperature, to breed the next spring.

SPIDERS

Spiders are the only insects that spin silk. From it they build egg sacks, nursery tents for their young, gossamer threads for ballooning, allowing the spiders to migrate on wind currents, laying safety exit lines, and most common the construction of webs to trap their food. The silk is secreted with spinnerets at the end of the spiders abdomen. As it comes into contact with the air the silk immediately hardens. Webs vary in shape and size with the family of spider. The simple web is most widespread, a circular web with lines attached to the corners fixing it between a wall and ceiling, or between the branches of a tree.
The spider (Segestria senoculata) waits at the end of one line pouncing when prey is caught in the web.
Scaffolding webs with crisscrossing threads holding a central tangled web.
The spider (Pholcus phalangoides) hangs upside down, shaking rapidly when alarmed, then spinning raw threads with its long legs over insects caught in her web, covering its prey with silk, before delivering a poisonous bite.
Cobwebs are built by house spiders, in the corners of rooms, with the spider darting across its surface. The web is abandoned when covered in dust, a new web built close by. Money spiders sheet webs are dome or hammock shaped, with trip threads to entangle prey. The orb web, built by the garden spider, is the most effective web design, requiring less silk in construction and more effective in catching prey. It is built on grass and between tree branches with the spider resting a couple of legs on an attached line waiting for vibrations of its caught prey

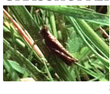
GARDEN SPIDER

There are about 40 species of garden spider in UK all of which construct orb webs. Orb web spiders reach full maturity in the autumn, having gone through progressive moults through the summer, shedding their outer skin as their size increases. In September and October their webs are visible on every hedge, flower and tuft of grass. Garden spiders build their webs in the evening or early morning, 30-60cms above the ground in positions likely to catch the most prey. The spider holds a line of silk connected to the web in its forelegs, which gives notice of struggling prey. It then dashes down to bite the prey with a venom, which contains an enzyme which breaks down its tissues into a liquid form which the spider drinks. It will cover its victim in silk for digestion at a later time.
To invite the female to mate the male tentatively tweaks the outer strands of the female's web. If successful the male inserts his sperm into the female via his palms, which he has already covered in sperm. His priority then is to retreat before being killed by the female. The female leaves her web some weeks after insemination to lay several hundred eggs in a secluded space in a cocoon under a stone, in a tree bark or in a garden shed. She covers the eggs with a double layer of yellowish silk. The eggs remain overwinter to hatch the following May. The spiderlings, the size of a pinhead, cling together in a tight ball until their first moult, when they will disperse to start to spin their own small webs. They will take two years before they reach full maturity.

POND SKATER

The first aquatic insects to appear in the spring. They live on the surface of a pond, spreading its weight over a wide area with its very long legs, which they use it glide over the water. They feed from the insects that fall into the water and cannot escape. They lay eggs in March, attaching them to submerged plants. The young emerge through several moults each a smaller version of its parent.
midges

GRASSHOPPER



Grasshoppers jump and sing. It's powerful hind legs propelling it several feet, while the same hind legs, their hard ridges scraped together produce their song. Only the males sing. They live in the grass, as the grass is also their food. Eggs are laid in small egg pods, containing up to 14 eggs, which are pushed into the ground or on the base of tufts of grass. The eggs overwinter in their pods overwinter to hatch in April of the following year. They hatch as a nymph, resembling a small worm, from which it emerges and sheds its skin to become a minute wingless grasshopper. It will shed its skin four more times before it becomes a full grown adult grasshopper with fully developed wings. It will live in grassland through the summer until it dies in September. There are 11 species of grasshopper in the UK, each with a different song. Only the meadow grasshopper is unable to fly, Grasshoppers develop their skin colour to blend into their environment. It may be green if living in the grass and the same species, brown if living on stony ground. The common field grasshopper can be seen in as many as 12 different colours.

DRAGONFLY

Dragonflies were flying in the UK 300 million years ago. There are 27 species in the UK. They live near water, ponds, streams and marshes. They are predatory, hunting other insects on the wing. They have the most highly developed eyesight of all insects, which they need to be efficient hunters. That can spot prey 12m away. They mate in Spring. The male dragonfly sits on the female passing sperm through his penis under the second segment of his abdomen. Eggs are laid on the stem of a water plant, in the mosses at the waters edge or the female will drop her eggs directly into the water. The nymphs remain in the water for usually two, for some species even five years, before emerging as adults. They feed on water insects and fish, seizing their prey with their claws.