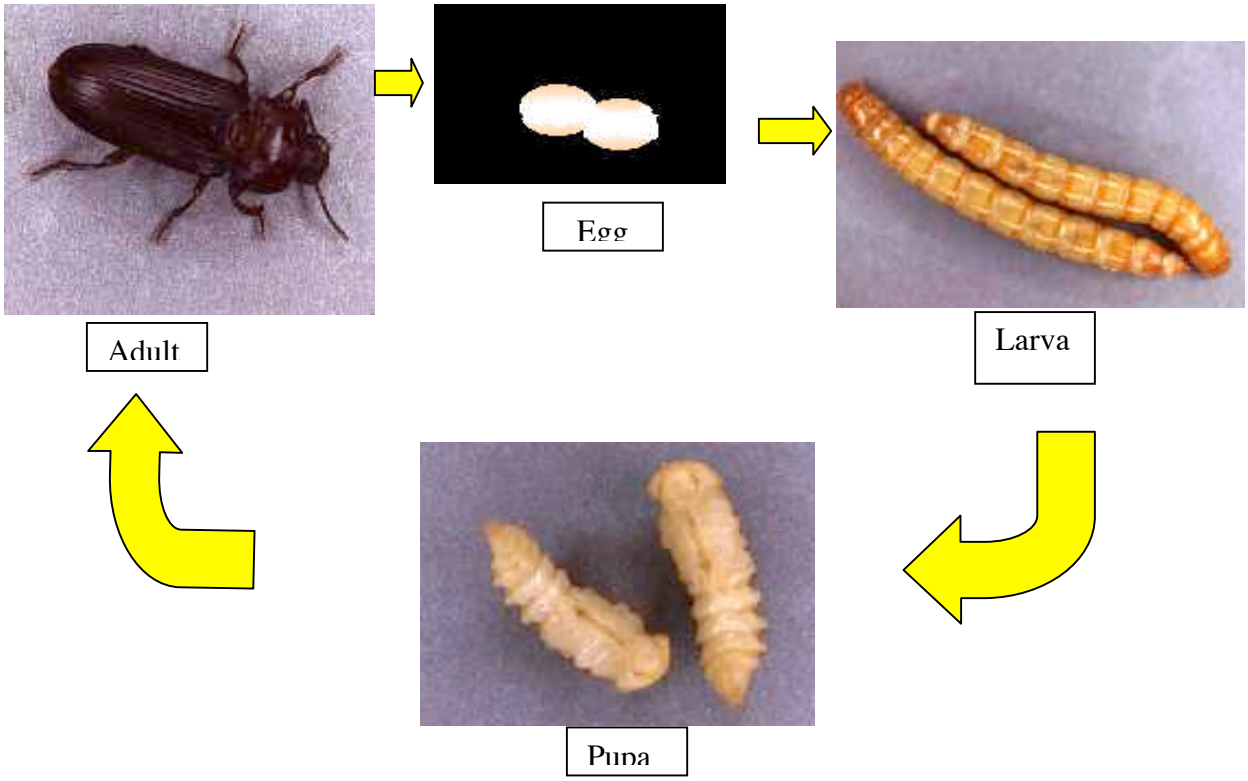
Life Cycle of a Mealworm



Larva

The mealworm may be tan or white. A mealworm needs to grow. Mealworms must molt in order to grow. The skin of the mealworm splits down the back and the mealworm slides out. When this happens, the mealworm is white. This is a sure sign that the mealworm has molted recently.

Pupa

The pupa is the inactive non-feeding stage beetles go through during complete metamorphosis. During this pupae stage the growing larva transforms into a reproducing adult.

Adult

Two or three weeks after the mealworm has pupated, a mealworm beetle will emerge. This is known as a **darkling beetle**.

Egg

The egg stage typically lasts 7-14 days but low temperatures and humidity can lengthen double this incubation time.

Mealworms are the larval form of the mealworm beetle, *Tenebrio molitor*, a species of darkling beetle. Like all holometabolic insects, they go through four life-stages: egg, larva, pupa, and adult. Larvae typically measure about 2.5cm or more, whereas adults are generally between 1.25 and 1.8cm in length.

Use as pet food and bait
Mealworms are typically used as a food source for reptile and avian pets. They are also provided to wild birds in bird feeders, particularly during the nesting season when birds are raising their young and appreciate a ready food supply. They are commonly used for fishing bait.

They can be purchased at most pet stores and are also available via mail order and the Internet. Mealworms are typically sold in a container with bran or oatmeal for bedding.

When rearing mealworms, commercial growers incorporate a juvenile hormone in to the feeding process, to keep the mealworm in the larval stage and achieve an abnormal length of 2 cm or greater. This crop is primarily sold for fishing bait.

Reproduction
Mealworm Beetles (darkling beetles) are prolific breeders, it is harder to stop them breeding than it is to get them to breed.

The mating process has three steps:-

1) The male chases the female until she gives up.

2) The male then mounts her and curls his genitals (aedagus) underneath him and inserts it into her genital tract.

3) Once the male has inserted himself he injects her with a packet of semen.

In a matter of days after mating (dependent on incubation temperature) the female will burrow into soft ground and lay between 70 and 100 eggs.

Hatching
After 4-11 days on close inspection you will see tiny little "mealworms" writhing around.

Larval Stage
During the larval stage "mealworms" will undergo repeated shedding, this shedding takes place 10-14 times as it gets too big for its skin, on its last shedding it loses its skin and then curls up into its pupal form. In the larval stage the mealworms will eat various vegetation or dead insects.

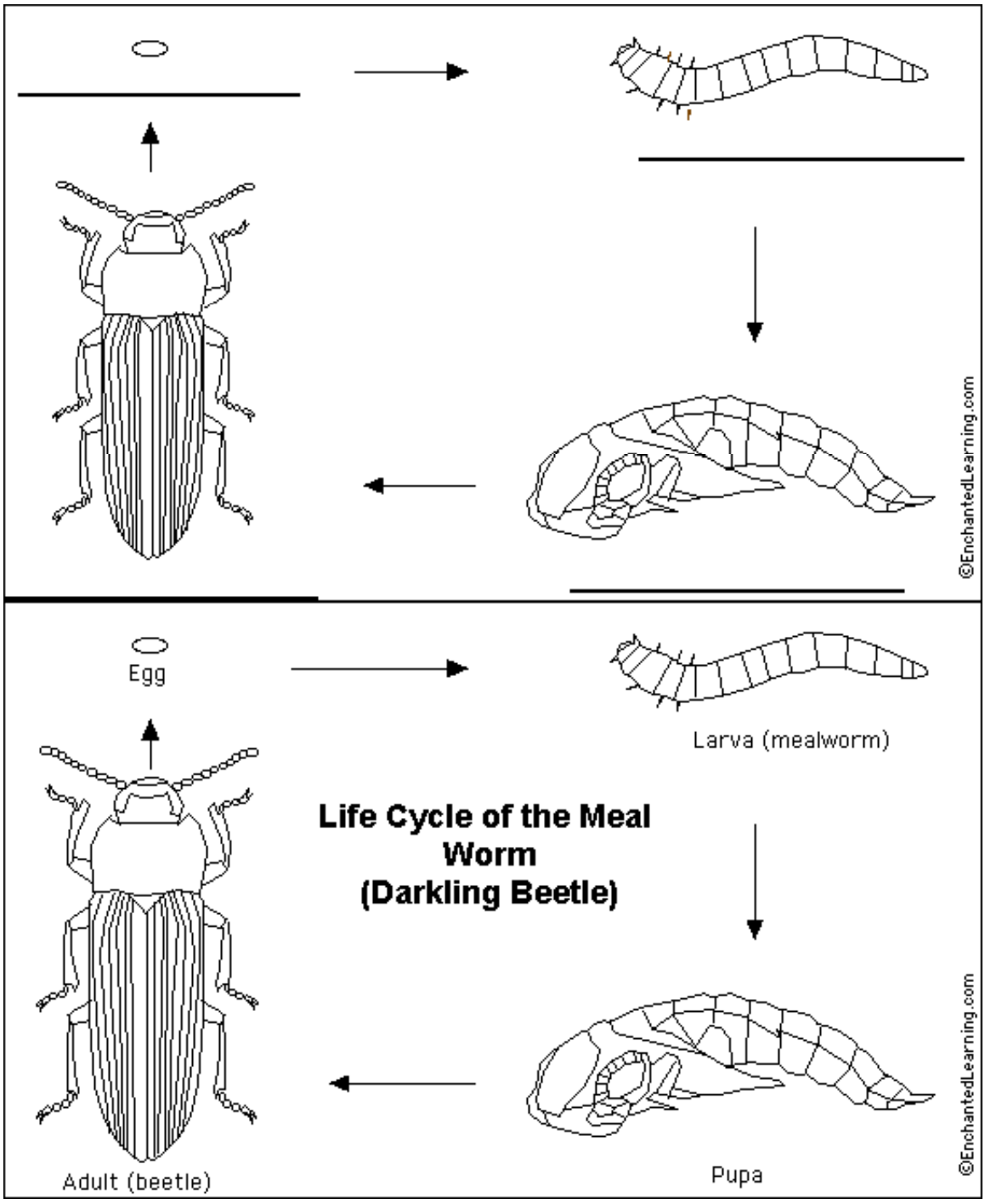
Pupal Stage
The mealworm remains in its pupal stage 6-30 days (dependent on incubation temperature), the pupae starts a creamy white and changes slowly to brown during its pupation stage.

Adulthood
The newly hatched mealworm beetle will sit still as its wings unfold and dry, it will appear a creamy color and will slowly brown over a period of 2-7 days. Once the mealworm beetles have browned they will become sexually mature and begin to look for a mate.

Human consumption
Mealworms have been incorporated into tequila flavored novelty candies. However, mealworms are not traditionally served in tequila or mezcal drinks, the latter sometimes containing a larval moth (Hypopta agavis).

Life cycle
* Incubation: 10-11 days at 20°C; 4-6 days at 30°C
* Larval period: 90-114 days (10-14 larval instars).
* Pupal period: 30 days at 15°C; 9 days at 25°C; 6 days at 35°C.
* Adult: 30-60 days

Adapted from: http://en.wikipedia.org/wiki/Mealworm



http://www.enchantedlearning.com/subjects/insects/beetles/mealworm/label/