Text Structure and Language Features: Example 2

Text Structure - Explanation

Statement of phenomenon

Explanation sequence

Background information

THE LIFE-CYCLE OF ANTS

Ants are members of the insect family Formicidae. Ants are found all over the world, but are especially common in hot climates. Ants are social insects that live in large groups called colonies. Most ants live in nests, which may be either below or above the ground. The social behaviour of ants, along with that of honeybees, is the most complex in the insect world.

There are usually three castes of ants in a colony: queens, males, and workers. The queen spends her life laying eggs. One type of ant, the driver ants, have an enormous wingless queen who lays up to about 25,000 eggs at one time. The workers are females and do the work of the nest. The larger ones are soldier ants, who defend the colony.

The life cycle of the ant has four stages - egg, larva, pupa and adult- and spans about 8-10 weeks. At certain times of the year, many species of ant produce winged males and females. They fly into the air, where they mate. The male dies soon after mating, and the fertilised queen establishes a new nest.

Fertilized eggs produce female ants (queens, workers, or soldiers); unfertilized eggs produce male ants. The worm-like larvae have no eyes and no legs; they eat food regurgitated by adult ants. The larvae moult (shed their skin) many times as they grow.

After reaching a certain size, they spin a silk-like cocoon (against a solid object, like the wall of the chamber) and pupate. During this time the body metamorphoses (changes) into its adult form. The pupa emerges as an adult.

There are many species of slave-making ants. These are species which live in the nests of other species, as parasites. This means that the larvae, or young ants, are given food by the host workers. One type of ant which does this is an African ant. The queen allows herself to be dragged into the nest of the Tapinoma ant species, where she bites off the head of their queen and begins laying her own eggs, to be cared for by the Tapinoma workers. Some queens can live over 15 years, and some workers can live for up to 7 years.

Two useful links:
1. an interactive life cycle site, http://research.amnh.org/entomology/social_insects/ants/ant_colony_cycle.html
2. an excellent educational site with cut out cards, http://www.enchantedlearning.com/subjects/insects/ant/

Language Features

Use of timeless present, typical of much scientific writing, e.g. live, defend

Use of word chains to build topic information, e.g. ants, nest, queen, life cycle

Use of relating verbs, e.g. Ants are found all over the world.

Use of action verbs to build sequence of events, e.g., fly, mate, fertilises, pupate

Use of passive voice, e.g. are given food, regurgitated by

Use of general nouns, e.g. ants

Use of technical language, e.g. pupa, larvae

Use of classifying adjectives, e.g. , driver, host, social

Use of detailed noun groups, e.g. an enormous wingless queen

Use of time conjunctions, e.g. as they grow

Use of adverbial phrases, e.g. soon after,

Use of empty subject, e.g. There are usually three castes of ant in a colony

Use of compound and complex sentences