

### 3.E Exam Expectations

DEFINE aposematic coloration

DEFINE mimicry

DEFINE convergent evolution

STATE that natural selection favors behaviors that maximize reproductive fitness

LIST the steps in signal transmission at chemical synapses

LIST ways in which (types of sensory information) animals communicate

LIST the steps (in order) when a stimulus is perceived by the nervous system

LIST three general functions of the nervous system

LIST three potential types of post-synaptic cells

OUTLINE an example of predatory warnings seen in some animals

OUTLINE examples of using visual, auditory and tactile signals to ensure reproductive success

OUTLINE an example of cooperative behavior that increases the chances of survival of the individual and the group

COMPARE depolarization and repolarization

IDENTIFY the type stimulus that each type of receptor detects/transduces

SUGGEST pros and cons to each type of communication signal: olfactory, visual, auditory, tactile and electrical

DISCUSS why animals would “help” other animals of the same species from an evolutionary point of view

DISCUSS how courtship and mating behaviors are vital to evolution

EXPLAIN Batesian & Mullerian mimicry

EXPLAIN an action potential

EXPLAIN signal transmission at chemical synapses

EXPLAIN the resting potential and threshold potential

DESIGN an experiment

ANALYZE a graph of the action potential to answer question(s)