Standard: SB4. Students will assess the dependence of all organisms on one another and the flow of energy and matter within their ecosystems.

Element: f. Relate animal adaptations, including behaviors, to the ability to survive stressful environmental conditions.

EQ: What animal adaptations allow them to survive stressful environmental conditions?

Define adaptation: characteristic of an organism that allows it to survive in its environment

I. Coloration Patterns

A. Cryptic Coloration (camouflage)

1. What is it? organism blends in to environment

2. Why is it good for the animal? helps it avoid predators

3. Example: frog blends in to tree, leaf insect

B. Aposematic Coloration (warning coloration)

1. What is it? bright colors

2. Why is it good for the animal? warns predators that it is dangerous

3. Example: coral, poison dart frogs, sea slugs

C. Disruptive Coloration

1. What is it? Color pattern that breaks up the outline of an organism

2. Why is it good for the animal? confuses predators (can't see the eye/head)

3. Example: fish with stripes

D. False Eye Spots

    1. What is it? _Spots of color that look like eyes_

    2. Why is it good for the animal? _makes it look larger, tricks the predator_

    3. Example: _spots on a butterfly, caterpillars, fish with spot on tail_

E. Mimicry

    1. What is it? _one organism looks like another_

    2. Why is it good for the animal? _predators avoid it because it looks dangerous_

    3. Example: _King + coral snake_

II. *Behaviors*

A. Hibernation

    1. What is it? _animal sleeps through_

    2. Why is it good for the animal? _helps it survive a harsh winter_

    3. Example: _bear, dormouse_

B. Migration

    1. What is it? _seasonal movement of organisms_

    2. Why is it good for the animal? _they can go where it is warmer + find food in the winter_

    3. Example: _birds, whales, butterflies_

C. Herding/Schooling

    1. What is it? _animals gather together in a group_

    2. Why is it good for the animal? _protection; safety in numbers_

    3. Example: _deer, zebra, fish_