SUBJECT: Science YEAR: 7 MTP TITLE: Adaptations HALF TERM: 1 NO. OF LESSONS (approx): 9

Deliberate and specific retrieval of expected prior knowledge (be specific)

Retrieval should occur regularly throughout the learning journey:

Recall simple food chains and identify and name different sources of food.

Describe basic adaptations of organisms to their habitats and how different plants and animals depend on each other

Key Questions

"How are living things related to each other within an ecosystem?"

"How are organisms adapted to live in their environments"

Academic transformation (be specific)

Your core curriculum must do all of the following:

- Ecosystems
- Habitats
- Interaction of communities in an ecosystem through the use of food chains, and food webs.
- Predator prey cycles
- Decomposers
- Importance of insects
- Toxins in the environment
- Animal adaptations
- Plant adaptations

Scientific skills
Explain predator prey graphs
Sampling techniques (quadrats/transects)

Maths skills
Data interpretations and analysis: Predator prey graphs
Population change: % increase/decrease calculations

Personal transformation (2 or 3)

Eco-Leadership Roles: students take responsibility for promoting sustainable practices within the school, developing leadership skills and personal responsibility.

DDT article - Ethical responsibility of humans to protect their environment

Career opportunities
- Biologist:
- .Marine Biologist
- .Ecologist/Field Ecologist:

Can I Learning Questions

Can I describe ecosystems and habitats?
Can I describe interdependence?
Can I construct predator prey graphs?
Can I recall animal and plant adaptations?

Literacy

Key vocab
Tier 2 vocabulary: Population, community, adapt, habitat, variation, organism
Tier 3 vocabulary: Abiotic, biotic, interdependence, biodiversity, decomposer

Disciplinary reading
Ecosystems article and questions
Crayfish article
Effects of DDT on Bee Populations
Classroom talk/discussion strategies: e.g. Think, Pair Share; I say you say; Choral Reading

Misconceptions (5 or 6 examples)

- Adaptation means perfection
- Adaptations are a matter of choice
- Immediate adaptation
- All traits are adaptations
- Adaptation benefits all species equally