

Year 2: Living Things

What should I already know?

Science - science is a subject where you ask questions about how the world works and find out the answers

National Curriculum Objectives:

- Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants and how they depend on each other
- Identify and name a variety of animals in their habitats, including microhabitats
- Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain and identify and name different sources of food

Powerful knowledge

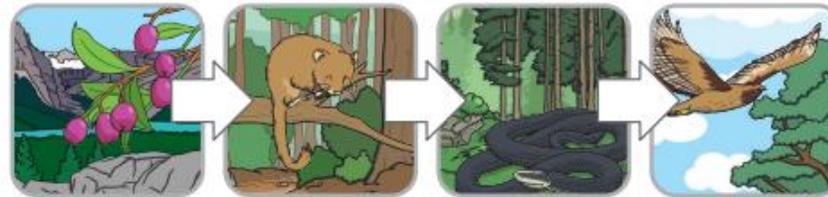
Characteristics of Living Things

Movement
Respiration
Sensitivity

Nutrition
Excretion
Reproduction
Growth



Food chains. The arrows mean 'is eaten by'.



Significant People



Anna Botsford Comstock

1854 - 1930

Anna grew up in New York, USA. She always loved nature. She started to study insects and draw and paint them

She wrote a book that is still used today to identify insects.

Interesting fact - Sadly people are causing many habitats around the world to disappear. Forests are being burnt down, lakes and rivers polluted and the polar ice caps are melting. Without our help, these habitats and the animals that live in them could become extinct

Glossary/Key Questions

Chrysalis



A hard protective case that a butterfly caterpillar turns into.

Cocoon



A silk casing that a moth caterpillar spins around itself.

Never Living

Objects that never had the life processes. Rocks and metal is never living.

Life Processes

All living things do this! They move, breathe, sense, grow, make babies, get rid of waste and get energy from food.

Respire

To breathe. All living things need to breathe.

Habitat

The natural place where something lives. It has everything a creature needs to survive. Food, shelter and water.

What is a life cycle?

A life cycle is the journey a creature takes throughout its life. It shows creatures growing up.

What is a micro-habitat?

A micro habitat is a very small habitat in places like under a rock or leaves. Minibeasts live in micro habitats. This small place has everything they need to survive.

What is a food chain?

A food chain shows how each animal gets its food. Food chains are one of the ways living things depend on each other to stay alive.

Examples of microhabitats:



short grass



flowers



inside rotting wood



under leaves



in and on soil

Examples of habitats:



woodland



urban



coastal



rainforest



arctic



desert



ocean



river



mountain



Science Year 2 - Living things and their habitats - Minibeasts

National Curriculum Objectives:

- Explore and compare the differences between things that are living, dead, and things that have never been alive
- Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other
- Identify and name a variety of plants and animals in their habitats, including microhabitats
- Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.

Prior Objectives:

- No prior objectives

In Early Years:

- Comments and questions about the place they live or the natural world.
- Shows care and concern for living things and the environment.
- Can talk about things they have observed such as plants and animals.
- Notices features of objects in their environment.
- Comments and asks questions about their familiar world.

Lesson 1



Skill - Group



Knowledge - People, animals and plants are all living things.

Lesson 2



Skill - Identify



Knowledge - All living things move, respire, sense, need nutrition, excrete, reproduce & grow.

Lesson 3



Skill - Make observations



Knowledge - Habitat = place where animals & plants live, can find everything needed to stay alive.

Lesson 4



Skill - Predict



Knowledge - A mini-beast is a small creature like an insect, a worm or a spider.

WALT: Compare the living and non-living.

WILF:

- Make comparisons
- Ask questions
- Group living things

Odd one out. Picture of tree, box and baby
Compare these pictures.

Generate any questions they have about living things.

Are people alive? How do you know?

How do you know a box is not a living thing?

Chn play a game of what am I? With lots of different living things.

Recording:

Sort pictures into living and non-living

WALT: Identify the characteristics of living things

WILF:

- Compare characteristics of living things.
- Identify 7 Characteristics.
- Create a freeze frame.

What is a characteristic?

What characteristics do humans have?

Animals? Plants?

Introduce Mrs Nerg

Is fire alive?

Look at different animals and plants to determine if Mrs Nerg really works.

Recording:

Chn act out the 7 different characteristics of living things.

Make a freeze frame and take a picture or record a video.

Alternatively, they can draw a picture to represent each characteristic.

WALT: Observe living things in their habitat.

WILF:

- Identify 7 characteristics.
- Find a habitat.
- Sketch a habitat.

Revisit Mrs Nerg

How do humans use Mrs Nerg? e.g. Move = run

What is a habitat? What is our habitat?

Where do we live? What living things live there?

How does your habitat keep you safe?

How does your habitat provide food? How does it provide space to move?

In groups, chn go to the front of the school to map out what their habitat looks like from the gates.

Another group, map out how the school is their habitat.

Recording:

Sketch what their habitat looks like.

WALT: Identify animals in their habitat.

WILF:

- Make predictions
- Find microhabitats
- Find mini-beasts

Tell chn Animals have habitats too. Some are big and some are small. Today you will be looking at microhabitats.

Give chn examples of rocks, grass, wood, leaves, soil and flowers.

Children predict which animals might live in these microhabitats.

Chn take turns at going into the school garden and try to find mini-beasts. Use magnifying glasses. Important to inform chn to not hurt the animals and to put back the habitats as they found them.

Recording:

Chn could draw their mini-beasts in their microhabitats. Take pictures. HAPs can write a sentence about what they found.

Assessment: Use the vocabulary mat to assess the children's prior knowledge and use the mats again to assess what the children have learnt.

Key Vocabulary: Living, dead, never alive, habitats, micro-habitats, food, food chain, leaf litter, shelter, sea shore, woodland, ocean, rainforest, conditions, desert, damp, shade, mini-beast



living



dead



alive



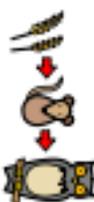
habitats



micro-habitats



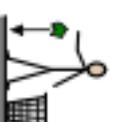
food



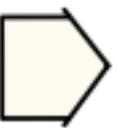
food chain



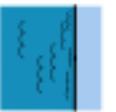
leaf



litter



shelter



sea



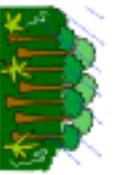
shore



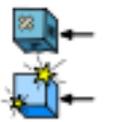
woodland



ocean



rainforest



conditions



desert

damp



shade



movement



respire



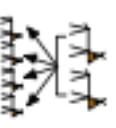
senses



nutrients



excrete



reproduce



growth