



Linked learning theme: Cracking Coast

Summer 2 Year 5

Science – Adaptation, Life Cycles, Reproduction in Plants and Animals

Prior Knowledge

In Year 4, children learnt about habitats and food chains. In KS.1 children learnt about the parts of a flowering plant and the function of each.

Core knowledge

- Conditions such as tides, changes in temperature, weather and light levels make surviving the intertidal zone difficult.
- Animals and plants are adapted to suit life in rockpools

- Life cycles of mammals, amphibians, insects and birds are different.
- The lifecycle of a mammal has 3 main stages: embryo, young, adult. Adults give birth to live young.
- The life cycle of an amphibian has 5 main stages: e.g. frog – eggs, tadpole, ?, froglet, frog
- The lifecycle of an insect has 4 main stages: eggs, larva, pupa, adult (complete metamorphosis)
- The lifecycle of a bird has 3 main stages: egg, young, adult. Adults lay eggs.
- The life cycle of a flowering plant involves 6 stages: germination, growing leaves, flowering, pollination, fruit, seed distribution

Key Skills

- Plan scientific enquiries to answer questions about the distribution of organisms in the intertidal zone.
- Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate e.g temperature change in rockpool over time
- Record data and results using scientific diagrams to identify adaptational features of intertidal organisms.
- Record data and results using tables to record distribution of organisms in the intertidal zones
- Record data in tables and line graphs to plot the temperature changes in rockpools over time.
- Report and present findings from enquiries into life in the intertidal zone in written and oral presentations.

Vocabulary

environment habitat conditions survival
adaptations intertidal zone organisms
life cycle stigma style ovary stamen anther
petal sepal root shoot seed dispersal pollination fertilisation
insect amphibian mammal bird egg metamorphosis pupa larva

Learning Outcomes

- I can identify how animals and plants are adapted to suit their environment in different ways.

- I can describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.
- I can describe the life process of reproduction in some plants and animals.
- I can record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- I can report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.