

Teacher Guide

KS2 · Year 6 · Evolution & Inheritance · objectives, misconceptions & differentiation

Lesson-ready notes to accompany the worksheet

Curriculum reference

National Curriculum (England) — **KS2 · Year 6 · Evolution & Inheritance**. Pupils should be taught to recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago; recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents; and identify how animals and plants are adapted to suit their environment and that adaptation may lead to evolution.

Learning objective & success criteria

Objective: to explain inheritance and variation, describe what fossils tell us, identify adaptations, and explain how adaptation may lead to evolution.

- I can explain inheritance and variation.
- I can say what fossils tell us about the past.
- I can describe how a living thing is adapted to its habitat.
- I can explain how adaptation can lead to evolution.
- I can reason about an example of natural selection.

Key vocabulary

inheritance · variation · offspring · characteristic · fossil · sedimentary · adaptation · environment · evolution · natural selection

Starter / Do Now (5 minutes)

Show parent-and-offspring photos (animals or plants); pupils spot what is the same and what varies.

Common misconceptions & how to address them

Misconception	How to address
Thinking characteristics gained in life are inherited.	Only inherited features pass on; use the giraffe example.
Confusing adaptation with a deliberate choice.	Adaptations arise over generations; individuals do not choose to adapt.
Mixing up inheritance and variation.	Inheritance = passed on; variation = the differences.

Differentiation

Support: key-word mat, picture prompts and sentence starters. **Stretch:** explain natural selection with a second example and discuss why evidence (fossils) matters.

Teaching this topic to SEND learners

This follows LearnarooHub's SEND & UDL approach: design for **multiple means of engagement, representation, and action & expression** (Universal Design for Learning), then add targeted adjustments under the "assess, plan, do, review" graduated approach of the SEND Code of Practice (2015), with the SENCo.

Mapped to the four areas of need (SEND Code of Practice): **Communication & interaction** — pre-teach vocabulary, symbol cards, sentence stems · **Cognition & learning** — Concrete-Pictorial-Abstract, chunking, part-completed examples, over-learning · **Social, emotional & mental health** — predictable structure, short

successful steps, movement breaks · **Sensory and/or physical** — enlarged print, coloured overlays, high contrast, tactile manipulatives.

Approach / tool	How to use it for this topic
Concrete-Pictorial-Abstract	Photos/specimens -> diagrams -> written explanation.
Dual coding	Images of adaptations beside the key words.
Reduce load	One question per box; key-word bank; reading window.
Sensory & physical access	Handle replica fossils; enlarged high-contrast sheet.

Compliance note: these adjustments are general good practice under the graduated approach; they do not replace a pupil's statutory provision. Record any access arrangements alongside the score and RAG.

Plenary / Exit ticket

Exit ticket: define inheritance and variation, and give one adaptation of a chosen animal with a reason.

Assessment & tracking: record the score out of 23 and the RAG outcome; both feed the class skill-gap matrix and the pupil's progress dashboard.

Source: National Curriculum in England — KS2 · Year 6. SEND aligned to UDL and the SEND Code of Practice (2015).